FEBRUARY 1986 ISSUE 2 95p

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NOW YOU CAN EXPLOIT SPECTRUM GRAPHICS TO THE ULTIMATE.

With the Graphics Suite from Print 'n' Plotter.

If you're interested in producing great graphics with your Spectrum, then these programs are designed with *you* in mind.

And you *don't* have to be an expert. Even with no programming knowledge the programs will enable you to produce fantastic graphics to use in every piece of software you write.

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Each of the programs are inter-active and together they form the most accomplished graphics toolkit you will find on the market today.

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With Print 'n' Plotter's 'GRAPHICS SUITE', everything is made so simple you won't believe it.



Just a few of the things you can do...

PAINTPLUS (GRAPHICS SUITE 1)

If you want to produce fantastic screen graphics or UDG's on your Spectrum, then you will find PAINTPLUS not only a complete graphics toolkit . . . but also the simplest to use at every level.

Facilities include: DRAW, PLOT, ARC, CIRCLE, FILL IN SOLID OR PATTERNS, FILL IN OVER MODE, DRAW RADIALLY, ARC RADIALLY, ENLARGE TO EDIT, PAPER WASH, BOX DRAW and so on . . .

As well as drawing, PAINTPLUS has a tremendous UDG section. It also has UDG "grabbing" from screen as well as full facilities for defining, saving and loading UDG sets.

The Organiser section of the program enables you to automatically store multiple screen graphics or multiple UDG banks.

PAINTPLUS comes with a demo of screens, animation and alternative character sets, plus a copy of Print 'n' Plotter PICTURE BOOK – 100 pages of instructions, hints, tips, listings and related graphics information.

SCREEN MACHINE (GRAPHICS SUITE 2)

SCREEN MACHINE is *the* graphics manipulator.

Use it when you want to take your graphics and turn them into professional machine coded data for use in BASIC or M/Code programs.

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As well as memory compression, SCREEN MACHINE allows you to put your graphics through a series of highly-sophisticated graphics manipulations.

These include ENLARGE, REDUCE, RELOCATE TO OTHER PARTS OF THE SCREEN, STEP AND REPEAT, BLEND SCREENS TOGETHER, RECOLOUR SELECTIVELY OR GLOBALLY, FLIP SCREEN, etc.

And SCREEN MACHINE also has a dedicated Text Compiler – ideal for anyone who uses lots of text for instructions or menus on screen.

SCREEN MACHINE also comes with a copy of PICTURE BOOK and a demo that's so good you can't believe it.

ART-O-MATIC (GRAPHICS SUITE 3)

Ever wanted to produce screen graphics for Adventure Games, Educational, Training, or Scientific programs and run out of memory because the graphics handling consumed too much memory?

If so, you need ART-O-MATIC, Print'n'Plotter's great new graphics compiler.

With ART-O-MATIC you can draw, define and store an incredible number of screens or parts of screen in your programs as compiled instant machine code which is usable from BASIC or M/C.

The exact amount of compression possible depends on your graphics, but up to 99% is possible and an average of 85%-90% is usual.

ART-O-MATIC is a complete graphics drawing program, so you can produce your works of art and compile at the same time.

The instruction book and demo that comes with the program show you *everything* you need to know about cramming great graphics into your Spectrum.

SPRITE MACHINE (GRAPHICS SUITE 4)

There have been a number of programs called Sprite Generators. Most of these are self-contained and not a great deal of use to people who want to use Sprites in their own programs.

SPRITE MACHINE is different. This program was written with *you* in mind – whether you are a professional, amateur or beginner.

There's never been a simpler Sprite program to use. All you have to do is draw your Sprite and then choose from a fantastic range of options to get it doing what *you* want.

You can: animate your Sprites, choose any direction and starting position, adjust speed, adjust height, choose running time, decide on edge actions such as bounce, wraparound, reflect or stop, make intelligent decisions like strike and collision actions, colour your Sprites or take colour from the screen, trace or non-trace, etc.

The program comes complete with a cursor-operated Sprite drawing board and catalogue/store function.

Instruction booklet and demo are included with the program.

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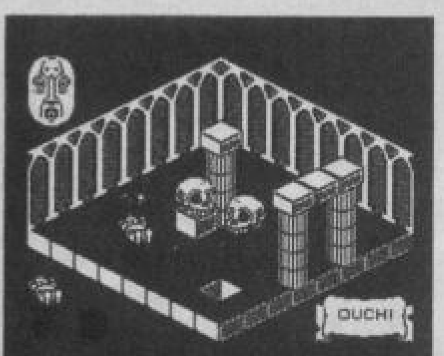
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FRONTLINES



Confused? You will be, when you read this zany bit of prose. Come on in and enter the world of Sweevo, a cute but absolutely clueless robot. This brainless heap of metal is extremely intelligent, clumsy, accident prone and has a lot of faith in apples.

Gargoyle invites you to help poor 'ol Sweevo reach Active Status by getting rid of the widgets (don't ask) and clean up Knutz Folly. It sounds completely Knutz to us!

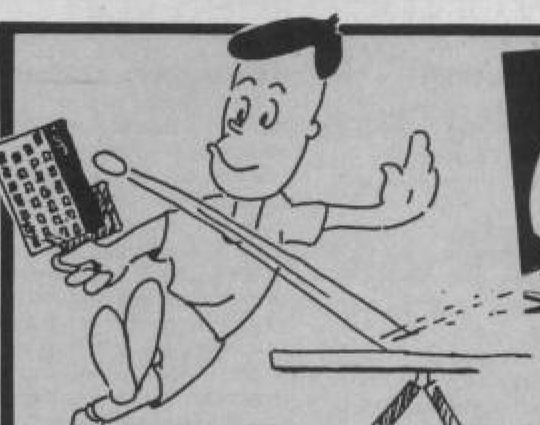


Hey, Jude. Yesterday, all my troubles were so far away. Now it seems there here to stay. Help! I wanna hold your hand. Remember the fab four? No 9 Software has just released *Beatle Quest*, a text and graphics adventure for the Spectrum specially designed for all you children of the Sixties. It's based on the song lyrics by John, Paul, George and Ringo, 'cept he never wrote any, and features puzzles involving thirteen of their most famous songs. Quite a Magical Mystery Tour.



You can tank Ariolasoft for this game. Called *Skyfox*, it's a flight and combat simulation that's defected from those Commie devils onto the winning side, ours! The Speccy version costs £8.95 and is due for release on January 6th. So, strap yourselves in and take off in your Skyfox to shoot up tanks and shoot down planes. That'll show those Commies!

• Calling all technobrains! Maplin Electronics has just released the 1986 edition of its catalogue that gives you all the gen on the latest spidery bits and bobs you can solder together. That's components to all you hi-tech bods — you've got hundreds of the devils living under your keyboard. If you want to know more about their feeding habits the Maplins book will tell you all for £1.45.







D Harwood's batty idea gets second prize.

WHAT A SAGA!

Stop holding your breath — the winners of the Saga Compo are about to be announced! Gasp! Cor! Wow! Calm down for a minute and cast your minds back to Your Spectrum 19 where we asked you what you'd do with your Speccy's rubber keyboard.

The four first prize winners certainly came up with the goods. Adam Norton of Farnborough said "I'd have it framed" and enclosed illustrations of 101 uses for a dead Speccy keyboard. Alan Bristow of Grimsby sent in a poetic use for his faithful friend. S P Kaliszlzak sent in a rather sadistic suggestion, "I'd cut it up and use it to enter a Your Speccy compo" and that's just what he did — a blackmail type letter made up of the keys! And finally A Burton from Barnsley who produced an excellent drawing. (Another keyboard gone for a Burton, eh? Ed.) Congratulations to you all, you'll all be receiving a Saga 3 Elite keyboard.

Don't go away just yet though. The three second prize winners who each get a Saga 2 keyboard are Colin Maclaren of Paisley, for his tippexed message, Trevor White and D Harwood who sent in cartoons. Take a look for yourself and see what you think!

Finally, the three Saga 1 keyboards go to P Camp of Cowley, Colin Reekie of Fife and Jose Alexandre Casteo of Portugal for their visual offerings.

And that just leaves us time to say a big thanks to everyone who entered — you'll all be receiving your £5 discount vouchers soon.



Ray Clemence, top international goalie and professional football hunk launches MacMillan Software's new game, *World Cup Soccer*. Nice one Ray!



Here's one for the Guinness Book Of Records *— Troubleshootin' Pete thinking? Well, he needed to 'cos he had to take on macho man Chris Palmer at the recent launch of Ariolasoft's* Think. *And shock, horror, gasp, Pete won!*

FANGS a million

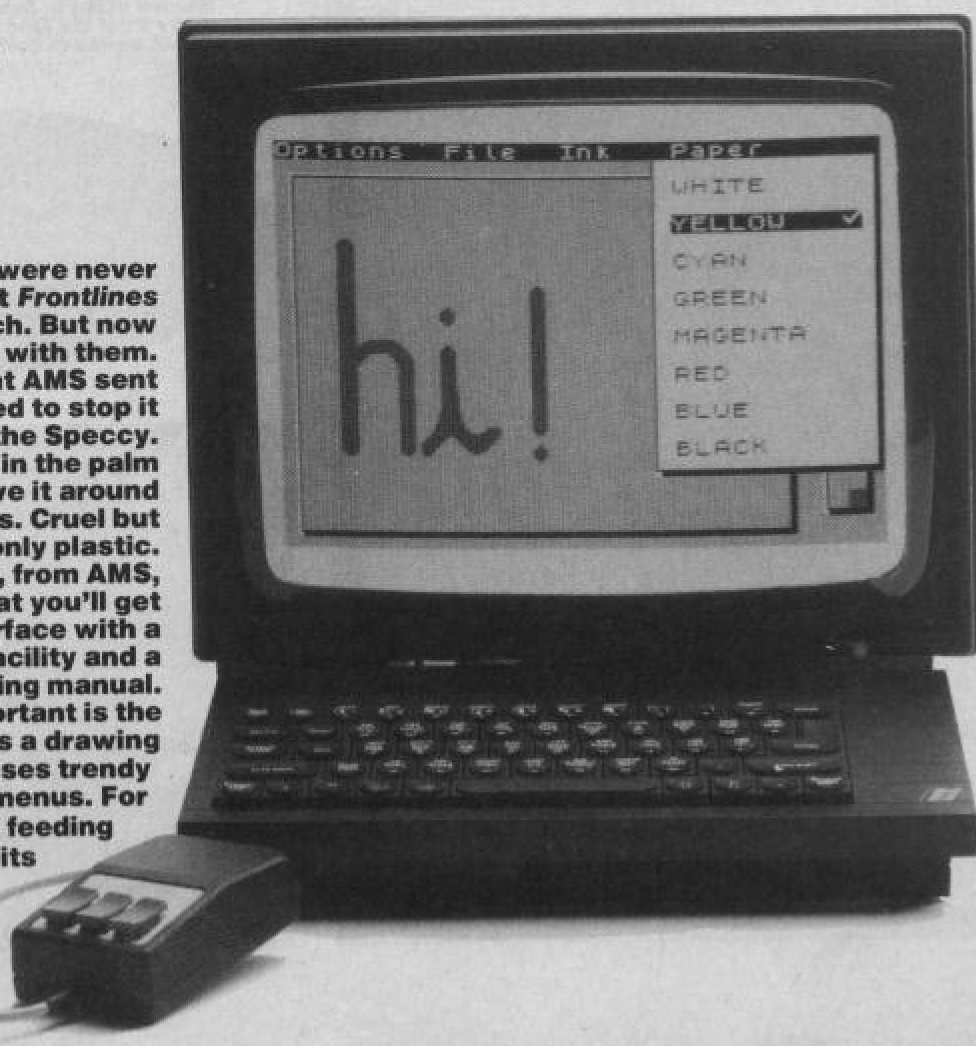
Get your teeth into this! Domark has donated 100 pairs of falsies (teeth, silly!) to Frontlines and we're gonna give 'em to you. Just tell us whether people with wisdom teeth are cleverer than others and send your answer on a postcard to Your Sinclair, 14 Rathbone Place, London W1P 1DE. And if you forget to tell us your name and address, you won't get no fangs from us!



What an amazing discovery! Opus's sales fall mainly in Spain and Italy and Germany and Sweden... Well that's what John Harris, Opus' Sales Director says. "We've made a tremendous impact in Spain and secured contacts in other countries too!" And the baby behind all this success? Well, that's a Discovery.



What a posy pair! Wonder-boy Stevie Smith and Yehudi White here are playing at the Black and White Minstrels and singing a merry note, to the tune of a cool one million, Saga's latest turnover. P'raps someone should teach them a thing or two about their instruments. The only noise their keyboards are likely to let out is a little wine!



Eek, it's a mouse. Mice were never really a problem that *Frontlines* worried about too much. But now the place is overrun with them. Fortunately, the one that AMS sent us has a lead attached to stop it running away from the Speccy. The idea is to grasp it in the palm of your hand and move it around while pressing its ears. Cruel but after all it's only plastic. The AMX mouse, from AMS, costs £69.95 — for that you'll get body, tail and interface with a Centronics printer facility and a fully illustrated operating manual. Much more important is the software — AMX Art is a drawing program that uses trendy icons and pull-down menus. For more details about the feeding and breeding habits of your mouse, call AMS on 061-483 2737.

T'zers...

The **YS** team has certainly been zipping about the country this month — it's a wonder we've had any time to write the magazine! I've been to see the Spectrum version of **The Young Ones** (see the amazing preview this issue) at Orpheus' headquarters in Bedfordshire. And what a hike that was — still I was well looked after by those nerdies at Orpheus. It's actually in Gamley, near Sandy and the office is a converted mill. There's even the original pigsheds — maybe that's where it locks up its programmers while they're writing new games!

Troubleshootin' Pete had a flying visit to Bury St Edmonds (wise man) to see Martech's new game, **Zoids**. It's a strategic wargame where you have to pit your wits against the evil robot Zoids. More of that next issue.

So what else is new this month? Well, Saga is about to release a word processor that it says is better than **Tasword** — we shall see! It's also going to bring out another keyboard, the Saga 2+ but that's all I know at the moment.

Domark is keeping busy. It plans to release eight to ten games next year and there's a good chance that you'll be seeing **Eureka II** amongst them. There'll be prizes too, though not on the scale of **Eureka** — sorry chaps. Oh, and I nearly forgot, Domark is also hoping to secure the rights to the new James Bond film. Let's hope it'll be better than the last one — game that is!

Electric Dreams is bringing out **Back To The Future**. Funny that, since it didn't know anything about it last month. Well, you know where you read it first.

Ocean has plans to release absolutely zillions of games next year. You should see the appearance of **Cosmic Wartones**, a shoot'em up, **Nomad**, another shoot'em up and **Hunchback II**, not a shoot'em up (it's an adventure) before Christmas. Things should hot up even more in 1986. January sees the release of **NFL Superbowl** to coincide with the final of the Superbowl.



These two wenches were out promoting Sir Fred *when they fell into the hands of programmers David Perry and Nick Jones. Now who's gonna rescue these poor damsels in distress?*

Seems that Quicksilva has joined the wargames bandwagon. Set in the final stages of a terrible war (aren't they all) Death Wake will have you quaking in your shoes. You play the part of the Admiral in Chief with the awesome task of restoring the homelands' morale and helping his army reclaim lost territory. But it ain't easy — the enemy is only a step away from producing, da da, an atom bomb! Sharp intake of breath. Arm your battleship The Undaunted and prepare to destroy the enemy. This is your last chance.

SEE YA LATER, GLADIATOR



Now you know just what it's like working on *YS* — not much fun! Slaving away over a hot typewriter, thrown to the lines, being instantly whipped by his imperial majesty, the Editor. Doesn't he know that Rome wasn't built in a day? Who's ya hero, Nero? *(Get on with it, slave. Ed)* Well, in Roman times, nobody and nothing was free — unless you fought for it. Domark has recreated the atmosphere of the Coliseum in its new game, *Gladiator*, reviewed in this ish. But fortunately you won't have to fight for the freebie that's on offer. To find out if our gladiator here ever makes it to the top, just fill in the coupon (or a photocopy of it) and send it to Domark. In return, you'll receive a huge full colour poster of the complete cartoon. That gets the thumbs up from us!

Those of us who are about to receive a full colour poster of a Gladiator in action, salute you.

Name...

Address ....

....

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Now send it to Domark Ltd, 204 Worple Road, London SW20 8PN.



FROM EL HIP

Eh, gringos come an' sip a tequila with me in the shade of that cactus for a fistful of faux pas — oops sorry wrong language!

D'you know, I woke up this morning with a dreadful feeling of foreboding — something was going to be drastically wrong. Just shows how wrong you can be. Something didn't go wrong — everything went wrong!

Apart from treading in the remains of a Tandoori take-away from the night before, I found the postbag choc-a-bloc with letters from frustrated readers who couldn't suss out the *Nightshade* POKEs from Hacking Away in the last ish.

Okay, nip off and dig out a pen — you're gonna have to do some writing as well this month. Done that? Right, turn to page 28, proceed to the bottom of the first column and make an emergency stop at the 'see final screen when you die' POKE. Now all you've gotta do is add '0' after the last POKE in the block of three. Simple innit? That should sort you out and **Ian Morris** from Hemel Hempstead and **Laura Thompson** from Epsom who wrote in for help.

Alex Miller of New Longton, Preston wrote me a note saying, "It's come to my attention that certain printer manufacturers are getting a little shoddy in their work. Gone are the standards of the British Industry..." Get to the point Alex. "I can't suss out the listing of *The Grid, Your Spectrum* 21. The offending lines are on the bottom of page 72." Hmmm, I see what you mean. Line 49576 should read:

BB 34 10 F5 21 4F BB 34 = 851

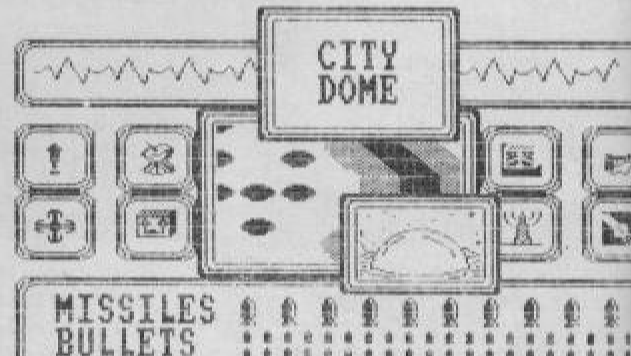
More printing problems come from **Daniel Golder** from Benbulben, Co. Sligo. Daniel's having difficulty reading line 4740 in the *Worm* listing in last issue. It actually reads:

4740 IF T<2 THEN LET T=25: PRINT AT 20,2" "

Got that Daniel? I hope that solves all your worries.

Well that just about puts the lid on it for another month. If you have any problems with the programs or the POKEs in the mag, drop me a line and I'll try to come up with the cure. Send your missives *(Or your missiles! Ed)* to From 'whatever-language-he's-into-this-month' Hip, *YS*, 14 Rathbone Place, London W1P 1DE. Adios pardners.

TROUBLESHOOTIN' PEDRO.

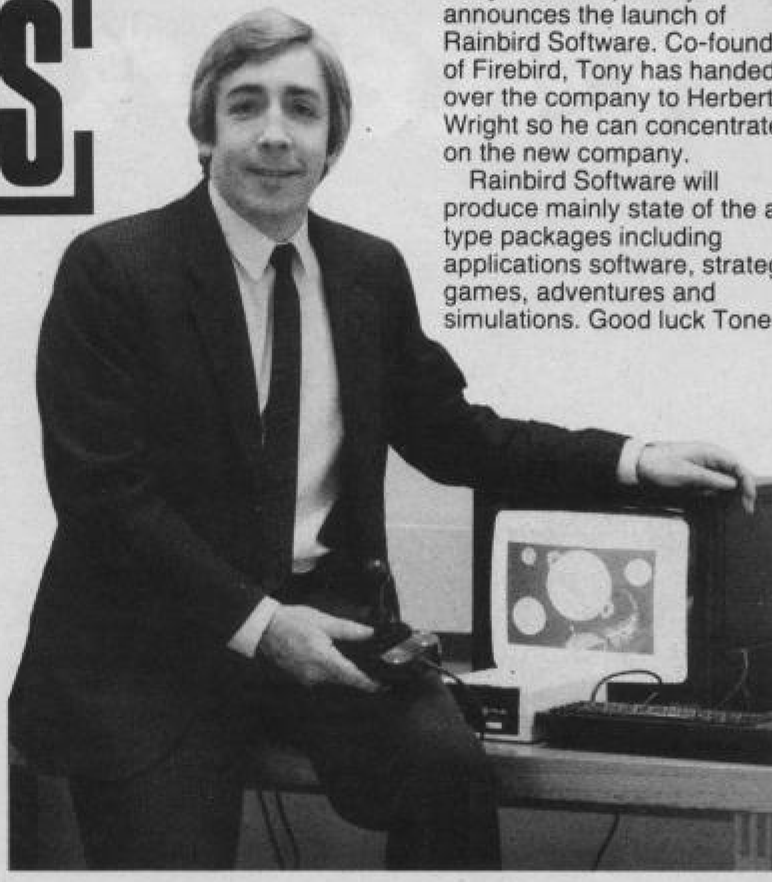


The Zoids are coming to a Spectrum near you. Mighty metal monsters locked in mortal combat in Martech's new megagame. Mmmm. You can get a good idea of the game from this exclusive preview screen shot. Your mind has been merged with the Zoid and what you see on the screen is exactly what the Zoid sees. Your mission is to find the six scattered pieces of Zoidzilla and restore him to wholeness

Hey this is really off the wall or maybe off the floor. The Stock Exchange has just surfaced as a new software company and its first offering is *Bulls And Bears*. And no it's not a platform game set in a zoo! It's an investment game. Cor maybe you get a free copy of the FT with it!



FRONTLINES



Tony Rainbird proudly announces the launch of Rainbird Software. Co-founder of Firebird, Tony has handed over the company to Herbert Wright so he can concentrate on the new company.

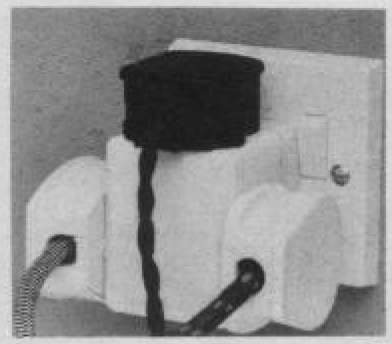
Rainbird Software will produce mainly state of the art type packages including applications software, strategy games, adventures and simulations. Good luck Tone.

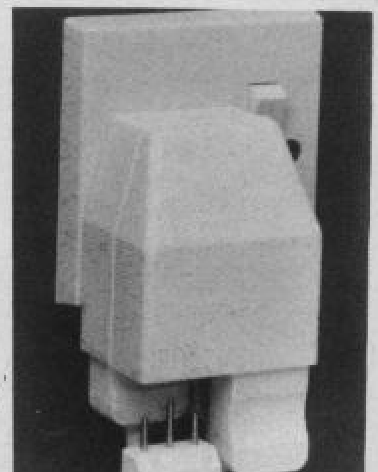


Crikey, Virgin games has made so much dosh out of *Now Games* that it's decided to bring out a sequel, *Now Games 2*. Virgin Games' MD Nick Alexander said, "We were so pleased with the Now Formula that we're doing it again!" This time round Virgin's sticking on Elite's *Airwolf*, *Tir Na Nog* from Gargoyle, *Cauldron* from Palace, *Chuckie Egg 2* from A'n'F and *World Cup* from Artic. Hang on though where's the Virgin game then? On second thoughts maybe it's not such a bad move to leave it out! Just a joke, guys.



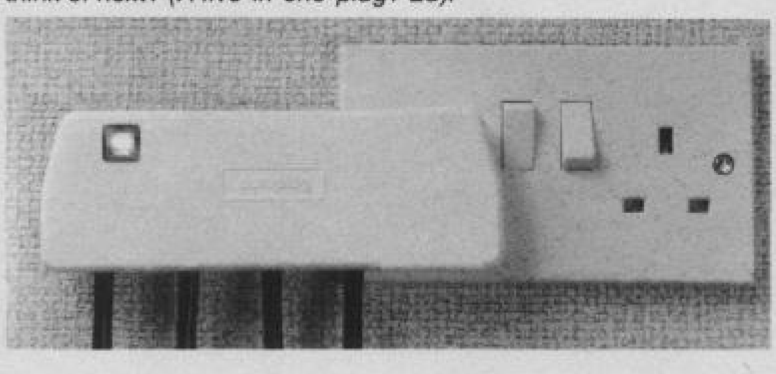
Hot on the heels of *The Art Studio*, Audiogenic has released *Icon Graphix* just in time to sneak onto the shelves before *Artist II*. It looks very much like a Commie conversion and lacks the one thing that everyone's screaming for — a mouse! Everything else is there, though — pull down menus, icon-driven commands and amazing fill structures. At £9.95 it's not a bad buy — even better if they'd included a rodent option.





Crikey! Those little devils at Conblock have been taking sneaky photos of the YS office power point. Bit messy we admit. Still at least we've now got the chance to buy Conblock's new four-way adaptor. It could knock your block off!

And if that doesn't switch you on, what about Duraplug's new four-in-one plug — the MultiLine? No need for four separate plugs — just wire up four appliances into the one megaplug. What will they think of next? *(A five-in-one-plug? Ed).*





Wacky software house, Global Software, is on the verge of releasing some new games. There's* The Beer Hunter*, calm down all you CAMRA fans, and* Attack Of The Mushroom People *— hey that's really heavy man. Look out for them early next year.

Buonos dios Juan, gotta new motor? Lucky old Juan Manuel Perez Vazquez picked up a cool £12,800 as the prize winner in Firebird's *Gyron* competition. He decided against the Porsche. A wise choice — imagine the insurance for a 16 year old!

Here's an interesting little fact. If you unroll all the **Rasputin** tapes we gave away last issue and lay them end to end they'll run to 2106 Kilometers. Wow! Ed reckons that's the distance between here and Russia, but then he's never been very good at geography.

What else? Oh yeah, **Movie** — an interactive 3D adventure. The action takes place in gangland New York and you've gotta find a cassette tape that contains vital info. Sounds fab! And for sci-fi addicts there's **V**. It's based on the TV series. Ocean is also rewriting **Street Hawk** 'cos it thought it was too dreadful to market. For once it's the first to admit it.

The rights to **Superman** outside the UK have been snapped up by software giants US Gold.

Argus Press Software hasn't exactly taken the charts by storm this year even with its subsidiaries Quicksilva, Bug Byte and Lothlorien but it looks set to release simply squillions of games next year. Let's see how good it is at keeping its New Year resolution.

One of the first of these games will be about telly's favourite plastic presenter, **Max Headroom**. It's due to stutter out s-s-sometime soon.

And finally we've a detective story with a happy ending — but don't try this yourselves kids. Odin had a break-in about a month ago and thieves got away with a lot of old deleted titles and eight copies of **Nodes Of Yesod**. Paul McKenna said, "Villains smashed down the door of Bug Bytes' premises where we were storing some software and helped themselves. We put the feelers out and got info that the goods were out on the streets in Manchester and Liverpool only an hour later." Odin actually recovered nearly all the software and six of the eight copies of **Nodes Of Yesod** but not with the help of the Police as I'd assumed. "Once we knew who had stolen the stuff and where it was located it was fairly straightforward. We just paid a little visit to these villains at 1 o'clock in the morning and got back all the stuff. They certainly won't do it again." That sounds ominous. Paul added, "Incidentally we weren't insured." Good job you got your stuff back then, eh lads?

Teresa Maughan


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RAM

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QL NEWS

What the Q 'ell's going on for the QL? Find out here...

Metacomco is delighted with sales of its latest product *QL C* which was launched in September. A Metacomco spokesman told *Frontlines*, "*QL C* has sold extremely well since its release and is now one of our most successful products."

***CDS* has just** released the QL version of *Steve Davis Snooker* — right on cue. And very playable it is too. Among its features you'll find computer play options with demo games, editing facility so you can set up your own tricks, three table speeds, accurate control over the degree of spin, joystick option and a variety of skill levels. And all for £14.95

The only trouble is we reckon it cheats. C'mon, even our Steve couldn't have pulled off some of the stunts the computer was throwing at us. There was this trick shot... *(Hmmm, sounds like someone's a bit of a bad loser. Ed)*



All looks jolly interesting, Steve!

***Psientific Software* has** just released *Q Calc* at £9.95. It gives you an on-screen calculator that multi-tasks with other programs and is available at any time. It runs perfectly happily with programs such as Metacomco's *Editor* and there's even a cut-down version called *Mini-Calc* for use with programs that require a lot of memory like the Psion packages.

Marriage a la modem. This complete communications package from Tandata is designed to colour co-ordinate with your QL. Called QL-Comms it consists of three modules that stack together. Q-Connect is an intelligent serial port that includes all the software you need for full viewdata and Prestel emulation. Q-Mod is a matched modem operating at 1200/75 bps and 1200/1200 half duplex. Finally, Q-Call completes the system with an auto-dialler that also works as an auto answer modem. And the cost of this little lot? £173.90 plus VAT. Tandata's just bought the system off another company, so if you'd like to buy one off them, give 'em a ring on 01-940 6211.



Firebird Software has finally decided to leap on the QL bandwagon with its first offering for the QL — *Booty*.

Booty sold over a 100,000 copies on the Spectrum and Firebird reckons the time's right for more games for QL owners, so it's decided to convert it. It's a platform game that takes place on board a ship. You play the part of Jim, the cabin boy, and have to wander round the ship collecting a number of keys that'll enable you to open the pirate's treasure chest.

Booty costs £9.95 on microdrive — more than other Firebird games, but to offset this Firebird has decided to throw in another game, *Grin Wars*, completely free. When asked why Firebird had decided to move into the QL market, Phil Pratt said, "We've been approached several times by hardware dealers urging us to bring out QL material and it seemed a logical step as many of our games are already available on the Spectrum." He added, "Many QL users have been left in the cold when it comes to games as there simply aren't that many available. We think it's good to have a presence in the market."

Booty should be available shortly before Christmas for all those hankering after some QL game madness.

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THE HIT LIST

Wanna know who's chasing who up the charts? What bubblers have burst on the scene or what raves from the grave are still grooving around? Then cast your opticals no further — all that's hot is here in the YS Hit List.

Chart Chat 2

This month's chart sees *Fairlight* dropping down from the top spot to number 6. Melbourne House's two martial arts games, *Way Of The Exploding Fist* and *Fighting Warrior*, have also been chopped down to size dropping from number 2 to 5, and 4 to 7, whilst *Daley Thompson* is holding his own at number 3. *Frank Bruno*'s own particular brand of exploding fist still lurks around the nether regions of the chart (*Bit below the belt that! Ed*)

The chart's high flyers have gone underground this month. *Monty Mole* has burrowed his way straight up the chart and surfaced in the number 1 slot with *Monty On The Run*. Close on his heels (or should that be paws?) is the underground bunker game, *Impossible Mission*.

Adventures seem to be out of favour though. *Starquake*, *Gyroscope* and *World Series Basketball* all enter this month, whilst *Shadow Of The Unicorn*, *Bored Of The Rings*, *Nightshade* and *Sorderon's Shadow* all 'Go West'.

This Month's Top Ten Titles

Position	Last month	Weeks in Chart	• Title/Publisher
1	—	5	• **Monty On The Run**/Gremlin Graphics
1	—	3	• **Impossible Mission**/US Gold
3	3	8	• **Daley Thompson's Super Test**/Ocean
4	—	2	• **Starquake**/Bubble Bus
5	2	11	• **Way of the Exploding Fist**/Melbourne House
6	1	8	• **Fairlight**/The Edge
7	4	6	• **Fighting Warrior**/Melbourne House
8	—	1	• **Gyroscope**/Melbourne House
9	—	2	• **World Series Basketball**/Imagine
10	8	10	• **Frank Bruno's Boxing**/Elite

12 Months Ago

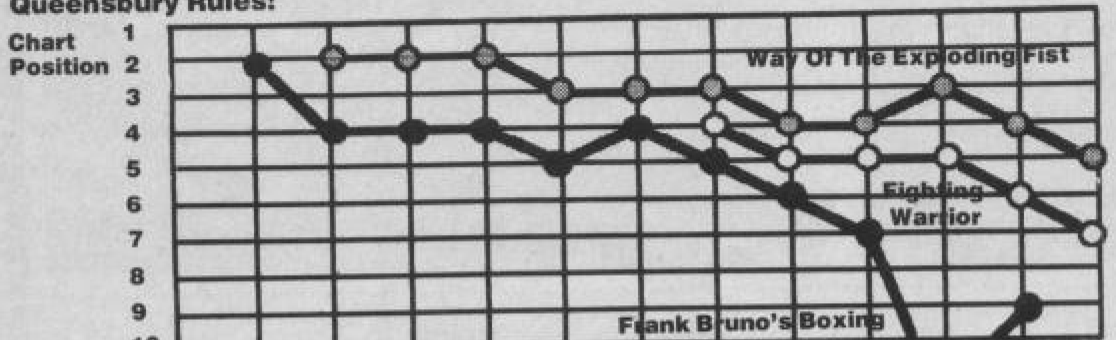
Position	• Title/Publisher
1	• **Underwurlde/** Ultimate
2	• **Daley Thompson's Decathlon/** Ocean
3	• **Eureka/** Domark
4	• **Knightlore/** Ultimate
5	• **Tir Na Nog/** Gargoyle
6	• **Combat Lynx/** Durell
7	• **Pyjamarama/** Mikro-Gen
8	• **Avalon/** Hewson
9	• **Travel with Trashman/** New Generation
10	• **Battle Cars/** Games Workshop

18 Months Ago

Position	• Title/Publisher
1	• **Mugsy/** Melbourne House
2	• **Sabre Wulf/** Ultimate
3	• **Psytron/** Beyond
4	• **Codename Mat/** Micromega
5	• **Jet Set Willy/** Software Projects
6	• **Trashman/** New Generation
7	• **Fighter Pilot/** Digital Integration
8	• **Solo Flight/** Microprose
9	• **Blade Alley/** PSS
10	• **Atic Atac/** Ultimate

Fist Fight

This chart shows the ups and downs of the fighting freesome (shome mishtake shurely! Ed). Those inscrutable oriental types seem to have the droop on our own Frank Bruno — but then again, they don't play by the Queensbury Rules!



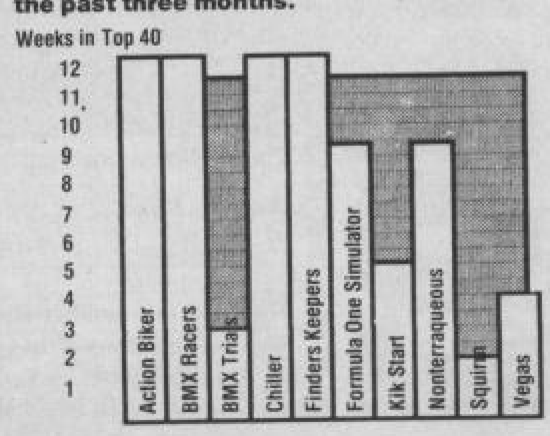
This chart is based on the *MicroScope* chart as compiled by Gallup.

MicroScope GALLUP

MicroScope is the weekly trade paper of the microcomputer industry. If your computer store doesn't display the latest *MicroScope* chart, ask the manager to call Mark Salmon on 01-631 1433 — we'll send a copy every week.

Masterful Ten

In recent months Mastertronic has had ten hit titles. Five of these have helped Speccy owners get their show on the road, on either two wheels or four. In particular, Mastertronic's *Action Biker* and *BMX Racers* have both had a sustained period of success. The bar chart below shows how each of Mastertronic's games has faired over the past three months.



COMPO

When Mr Bobo Baggybelly of Rathbone End announced he was about to celebrate his eleventy-first birthday and the launch of Melbourne House's* Lord Of The Rings *with a magnificent compo there was much talk and excitement in Speccyton.

LORD OF THE RINGS

"Wotta we gotta do?" said Dilli and Divvi with one voice.

"Something about summarizing *Lord Of The Rings.*"

"Bored of the Things?" asked Frond, Basildon Frond.

"No, *Lord Of The Rings*, the Tolkien book — we have to tell the whole story in less than 25 words."

"What's it worth?" asked Dildo

"Yikes — it says here a wow, whizzo, a-maze-ing, absolutely fave rave and fab hologram worth squillions of readies"

"What? You mean one of those fabarama 3D amazingly life-like images that you can hang on your hut wall?"

"Who's it of?" cried the assembled mass of Rathbone fairy folk.

"Er ... the Dark Rider"

"Spooo — keee" said Gland Alf, silently.

"Groo" said Baggybelly "Who's coming to the goblin party?"

"After we've filled in the coupon — even thirty runners up get copies of the game"

So send your entries to Bobo's hole in the ground — not a nasty, dirty wet hole you understand, oozing with worms, but because it's an editor's hole, one that means comfort — its address is *Lord Of The Rings* Compo, *Your Sinclair* 14 Rathbone Place, London W1P 1DE.



Lord of the Rings Runes, sorry, Rules

1. Entries should reach us no later than February 28, 1986, earthling calendar, that is.
2. There is no rule 2.
3. Bobo Baggybelly's decision is final. No correspondence will be entered into because the postman won't go to Middle-earth — he won't even go to Middle Wallop.

Honest Injun, I don't live or work in Rathbone End. The complete story of *Lord of the Rings* in less than

twenty five words is...

....

....

....

....

Name Rune...

Address Rune..

..Post code rune..................

Daytime Tel. number Rune...

Lord of the Rings Compo, *Your Sinclair*, 14 Rathbone Place, London W1P 1DE

If you don't fancy cutting off Bilbo in his prime use a photocopy instead.

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45 weapons and
fight for your freedom

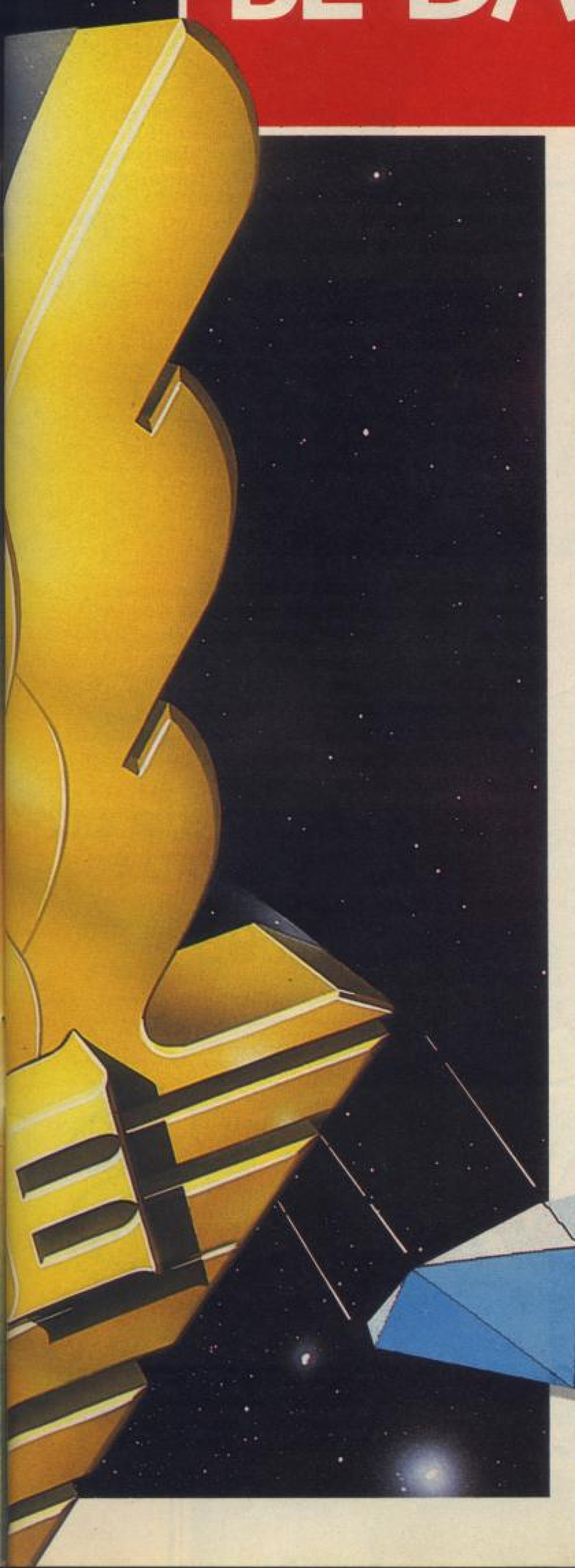
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card number on 01-947 5624. YS


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COMMODORE 64

You take command of a Cobra MK III combat craft and trade with alien cultures on over 2000 planets in eight galaxies.

Pick your destination on the starmap, check the computer's 4-way viewscan – and make your first jump into hyperspace.

Starting with 'Harmless' status, you pick up combat skills to win ratings of 'Average' to 'Dangerous'.

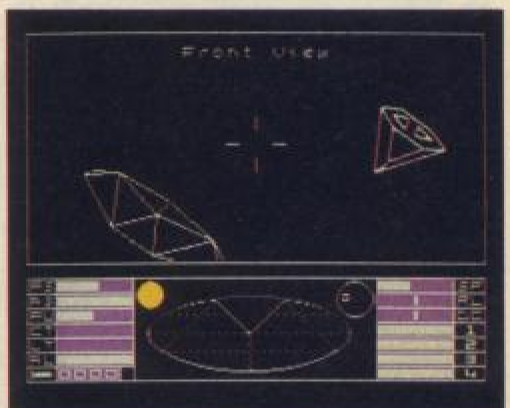
If you can handle it you could become one of the **Elite**, and win the chance to compete in the Elite World Championships.

It's dangerous all the way.

"To play it is to be entranced, enthralled and ensnared... stunning." (Computer & Video Games Magazine).

"A brilliant game of blasting and trading... **truly a mega-game**" (Gold Medal Award, Zzap! 64 Magazine).

"One of the most imaginative games ever designed to run on a home computer..." (Crash 'Smash', Crash Micro Magazine).



SPECTRUM 48K

Elite is here now for the **Commodore 64** and **128** and **Spectrum**, and (very soon) for **Amstrad** and **MSX** too – complete with Manual, Novel, Control Guide, Ship Identification Chart and more.

Elite.

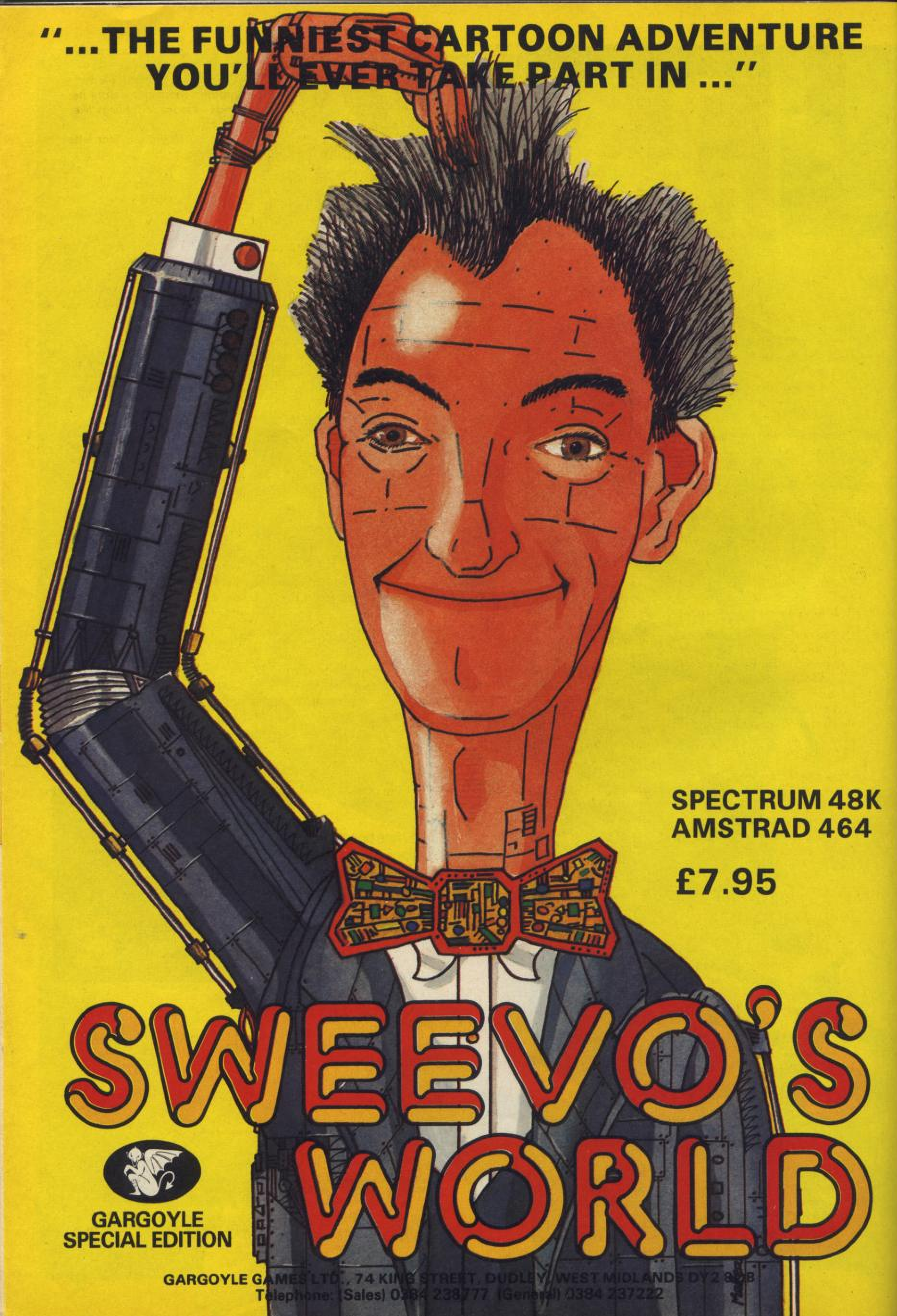
Be dangerous.

*Zzap! 64 Magazine.

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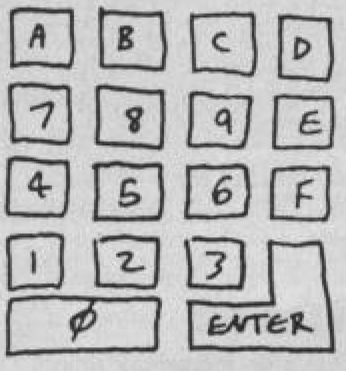
LETTERS

YOUR SINCLAIR, 14, RATHBONE PLACE LONDON W1P 1DE

A HEX ON YOU

I see that the new 128K Speccy has a small keypad attached to it. That set me wondering why a manufacturer hasn't yet come up with a hexadecimal format keypad to make typing programs in hex format into the Spectrum easier.

Such a device could plug into the interface port and simulate the relevant keys. It could look like this:



The arrangement of the keys with hex letters A-F on it, would certainly be more useful than a keypad with just numbers on it.

Perhaps YS Enterprises could market it. I'd certainly buy one!

SG Wylie
Ramsgate, Kent

Now there's an idea. Pass the soldering iron, Pete. But what do we do with all those left-over letter transfers — the ones that run from G-Z? Anyone else got any more bright ideas? **Ed.**

STAR CROSSED

I was very pleased to see my letter in your September issue made Star Letter.

I was even more pleased to see that a bundle of free software was on its way to me. Is it waiting — or where is it waiting — or what is it waiting for? I've just got the October YS and I see there's a bundle of free software for HIM too. Do I have to write 'more' Star letters and build up a 'bundle of free software' worth posting? Is all this in my mind? Am I dreaming? Does YS really exist? *(All these questions will come under discussion in Philosophy — What's It All Mean and Why Are We Watching Channel Four At A Quarter Past Midnight? Ed).*

Please write soon or I'm sending my wife to stay at your office for a month. Then you'll know what hassle is and why I need my Speccy so badly!

Mac Pittman
Newark, Notts

I just hope your wife doesn't read this or that's one less reader for YS. As for the main drift of your draft, I'm very tempted to make this the Star Letter again and not send you two lots of free software but I s'pose it's somebody else's turn not to receive 'em.

Oh, alright, so someone here's been a bit lax but I'm not going to say exactly who — it might just be me. I'll get one of the minions to look into it. Peeeee-ter! **Ed.** *Who're you calling a minion — I am not a vegetable!* **T.P.**

IT'S NO LAUGHING MATTER

This is going to be a sensible letter. *(It'll be the only one in the mag then! Ed).* It therefore follows that I shouldn't mention Peet Shore's name and indeed I haven't.

The Troublemaker (shouldn't that be shooter? No, he always misses!) has been makin' trouble lately, though.

Take *From The Hippy in Your Spectrum 19*. Here Pete tells us how to 'deal with' dec/hex conversion. He tells us to put the number we want 'dealt with' into the A register and call the shadow routine. Notice he never actually says that this is the number that'll be converted — which is just as well since he doesn't tell us where the hex value can be found.

Maybe this is partially caused by his physical disability — I wondered who the 'Invalid' in all those error messages was! Apparently, he doesn't have a 'beak to sip me coffee' either. I've always managed perfectly well without one . . . I don't feel sorry for Gollum!

Has anyone tried using the USR call from Codebusters on the YS MegaBasic input command? Nope? Well try it!

Can I say hello to Carl Whitwell? *(No, you ruddy well can't. What d'you think this is? Radio 1? Ed)*

Paul Taylor (Hacker Extraordinaire)

PS I'd use my old Speccy keyboard as a rubber fly swatter (CW). Don't get many rubber flies around here (PT).

Is there a doctor reading the mag? Quick, I think the Ed's just had a nasty attack of philanthropy. This — the Star Letter? Can you blame me for not sending out those bundles of free software! **Trouble-shootin' Pete** *Yes!* **Ed**

WE-EIRD!

Hey you. Yes you, the purple frog with the six heads, nineteen eyes and the little sign on your desk reading 'Ed'. *(I do hope you're not referring to our illustrious leader — well, it is the time of the year for my pay rise! Troubleshootin' Pete).* You will:

1. Please send me full details of this new game, *Alien 9* you seem to have invented in *Input/Output* ish 21. Or could it be ... No... it can't be ... yes, it's a cock up! What am I on about? Put a sarcastic comment here and you won't receive another one of my wonderful letters. *(Quick Pete, pass the file of sarcastic comments before he sends us more scribblings like this. Ed)*

2. Please award this Star letter or a Trainspotter 'cos this is my third attempt. *(Going for the sympathy vote, eh? Ed).* Failing that, start up a new award like Weirdo of the Month and give the first to me! It'd shut me up for the next few issues.

Yours for ever crawling from the bottom of my elbow.

Mark J Weirdo Jnr OBE,
President of the Hugo is a weird name society. (Membership 2)

PS Did you know that the controls for Ocean's new game *Rambo* are O to go left, P to go right and S to stop firing.

Weird? You're a positive fruitcake! And no, I'm not going to start an award for you and the other nutty member of the Hugo society. You need help, not encouragement! **Ed.**

RIGHT LETCHER

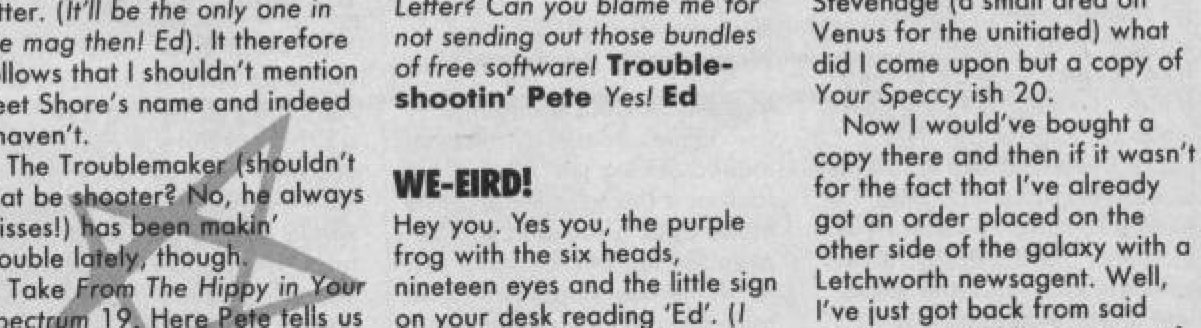
I've got a little gripe for you. *(What, only one? I'd just love a bunch of gripes. Ed).* About a week and a half ago while I was out shopping in a town known to most of us as Stevenage (a small area on Venus for the unitiated) what did I come upon but a copy of *Your Speccy* ish 20.

Now I would've bought a copy there and then if it wasn't for the fact that I've already got an order placed on the other side of the galaxy with a Letchworth newsagent. Well, I've just got back from said newsagents holding a copy of my precious mag (creep, creep) and what do I find? A couple of compos in Frontlines that say 'and the first twenty people to send in the correct answers to these questions could win . . .'

Isn't that just a bit unfair to all Letchworthians? I bet that at least nineteen of the right answers came from Stevenage!

DOODLEBUGS

If you don't want to send in a long drawn out letter, draw it out instead and send it to Doodlebugs, *Your Sinclair*, 14 Rathbone Place, London W1P 1DE



These cartoons are part of Adam Norton's winning entry in the Saga Keyboard Compo from Your Spectrum 20. Plus Adam, you've now won a game from Doodlebugs!

LETTERS

Oh, I suppose that making this the star letter will put all these things to right.
David Willmott
Letchworth, Herts in the right place.
PS While you're at it you could persuade the delivery bloke to come here first!

When it comes to compos the Ed's decision is final and he is unable to enter into correspondence on this matter ie the lazy old coot wants me to give you an answer. And the reason for running compos in YS that so obviously discriminate against Letchworthians is because . . . we've got it in for you, we're running a vendetta against the town, we just can't stand you. Happy, now? ***Troubleshootin' Pete.*** *And now tell 'em the real reason.* ***Ed.*** *Oh okay, what we really meant to say was that the first twenty people out of the Ed's hat win a prize — they'd just better not come from Letchworth that's all! Well, not all of them anyway!* ***T.P.***

WILDGOOSE CHASE •

flying doctor.
me a Trainspotters Award by
deserve compensation so rush
Castlemaine XXXX. I think I
something other than
from my hat. I almost drank
nearly maimed by flying corks
jump backwards and I was
shock of this mistake made me
Great Fire of London. The
except for a screen shot of The
mag was printed upside down,
eyes, I noticed that the whole
with tears welling up in my
final Your Spectrum (sob, sob)
While browsing through the
What are you Poms up to?
Nuneaton, Warwickshire
Wildgoose)
An Irate Wallaby (Karl

Ed *You to XXXX Castlemaine so. Gone already it's — T.A. no. Like more wally — wallaby about dunno. Special Antipodean an was Spectrum Your of issue last the that realise you didn't. Sport down kangaroo me tie well.*

THAT WAY MADNESS LIES

I want to tell you how much I like YS but there's one thing that's driving me mad. As I live miles from civilisation — and photocopiers — I'm forced to buy two copies of the mag so that I can enter the compos and take advantage of your features like Digi'T'ape and Program Power. By the time I've cut out all the forms, the magazine is dead and I have to go and buy another copy.

Is this a plot on YS's part to make more money? The death of a copy of YS is a serious matter and so is my financial position. My solution to this problem is either to give me the 95p to buy another copy or include a pull-out booklet of entry forms.
Dennis Carroll
Howwood, Renfrewshire

It seems obvious to me that living miles from civilisation is indeed driving you mad. But look at it this way — out there in the back of beyond without even the fun of the photocopier to fill the hours between dawn and dusk, what else is there to fritter your money away on? No discos, no Smarties, no Wham records — hmmm, not so bad after all! All those pound coins jangling around in your pocket means you'll eventually grow up lop-sided which is useful for walking up the sides of heath-covered mountains but not much cop for forming deep and meaningful relationships, and then you'll end up a bitter and twisted old miser. No, all things considered, YS is doing you a great favour. Ever considered buying three copies a month? ***Ed.***

AGONY AUNTIE

I have a problem. Perhaps you can help me Pete? (*You really do have a problem if you think Pete can help you! Ed*). Well, actually, it's not me personally but a mate of mine. It's like this. He doesn't know whether to buy a Spectrum or a BBC or even a Commie 64.

I've told him a million, million times to get a Speccy but he's still unsure. D'you think he's bonkers? I mean when I got my computer I went straight to a Speccy dealer. Could you give him a few words of inspiration to make him buy a Spectrum?
Nigel Clarkson
Durham

Well, Nigel dear, I can see you really do have a problem. Oh, sorry . . . your 'friend' really has a problem. But if we're lucky, you may have caught it just in time — another couple of weeks and it could've proved fatal. The trouble is that if your 'friend' can't see that the Speccy has the best games, the best graphics, the best . . . well, it maybe that surgery is the only answer! There maybe a hope, though — even your 'friend' will be able to see at a glance that the Spectrum has one great advantage over the other machines. It has by far the best mag on the market — this one. So, get round there and show him a copy now. Will you do that for me? Will you, dear, will you? ***Troubleshootin' Pete.***

SPACED OUT

Here's an incredibly simple idea that everybody probably knows already. But I'll tell you anyway. If you want to put a lot of instructions in a Print statement, after the first quotes fill the remainder of the line with spaces and start writing on the next line as you want it to appear. When you've finished all the information you want to print, you can erase the first line of spaces. This saves a lot of time searching and justifying half words and the like.
Steve (useless programmer and games player) **Osborne**
Carlton, Notts in my hankie

As Mr Caine would say, norra lot of people know that!
Troubleshootin' Pete.

TRAINSPOTTER AWARD



Seen the newest adventure from Mosaic House lately? *Terror-Mole-nos!* You have to construct a diary of your Spånish hols. But beware, you must bring back ten out of twelve successful pages of the diary.

Confused? Take a quick look at page 59 of *Your Spectrum 21* and see what I mean. Come off it Ed, surely you can come up with something a bit harder. I don't care anyhow 'cos I claim my Trainspotter Award so there!
Stephen Trask
Rochdale, Lancashire

Herumph. I think you're just making a mountain out of a Mole-hill but you don't terrorfy me. Let's see what the next contender for the Trainspotter Award has to say for herself...

I've just read Your Spectrum 21 upside down for the first time ever — it's worth doing this when you get to page 51 as it's the only way to get a good look at the screen shot of The Great Fire Of London even if you do miss out on the rest of the info on that page! I thought I'd be safe for the rest of this issue. Surely, even you would not subject your readers and fans (?) (*?? Ed*) to yet more complicated contortions.

Who could have guessed that you — in your wisdom (??) (*??? Ed*) — had planned on driving us all up the wall by printing another screen shot of *Adrian Mole's Diary* under the heading of *Terrormolinos?*

Now, hanging from the ceiling and confused as to which way up to read your mag, I'm in urgent need of a restorative for the nervous tension caused by this issue of YS — so how's about a Trainspotter Award... or two???(*???? Ed*)
Mrs L O'Neill
Transylvania

All that hanging upside down must have driven you completely batty! As for pointing out our mistakes, all I can say is fangs for nothing — you really got your teeth stuck into them, didn't you? Still, this month's Trainspotter Award will have your name on it — written in blood! You can stake your life on it, in fact. Now pass the garlic, Pete. ***Ed*** *I suppose you're going to tell me my job's at stake now...* ***Art Ed.***

SMALL PRINT

...Owing to a shortage of brain cells in vital areas, I am totally machine code illate... illrate.. blind — see, when they were giving out brains, I thought they said trains so I lashed out for a small, slow one! (*Yep, you've got all the makings of a first-class trainspotter! Ed*).
David M Gibbon
Salisbury, Wilts

...and before I run (from Ed's claws) I think *Digi'T'ape* should have programs on it that are too long for publication in the magazine. This way programmers would feel free to create 30K games. (*Feel free! Sounds like a good idea. We've got the tape if you've got the time! Ed*)
Freddie Lewis
A Barton lad from Bedford

...I was thumbing through issue 21 of *Your Speccy* — yes, that's the one with a picture of the Ed on the front cover, grovel, grovel. (*Ho, ho, who're you trying to kid. The Ed as Rambo? Dumbo, more like! Troubleshootin' Pete. Uuurgh...if I could only pick up this Bullworker I'd clobber you with it. Ed*)
Fraser B Wallin
Ramsgate, Kent

...Is it true that only Groan-ups can crack jokes as badly the Ed? (*Oh, groan. Ed*).
Andrew McGutchion
Earlsdon, Coventry

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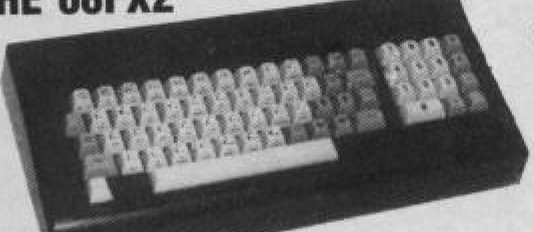
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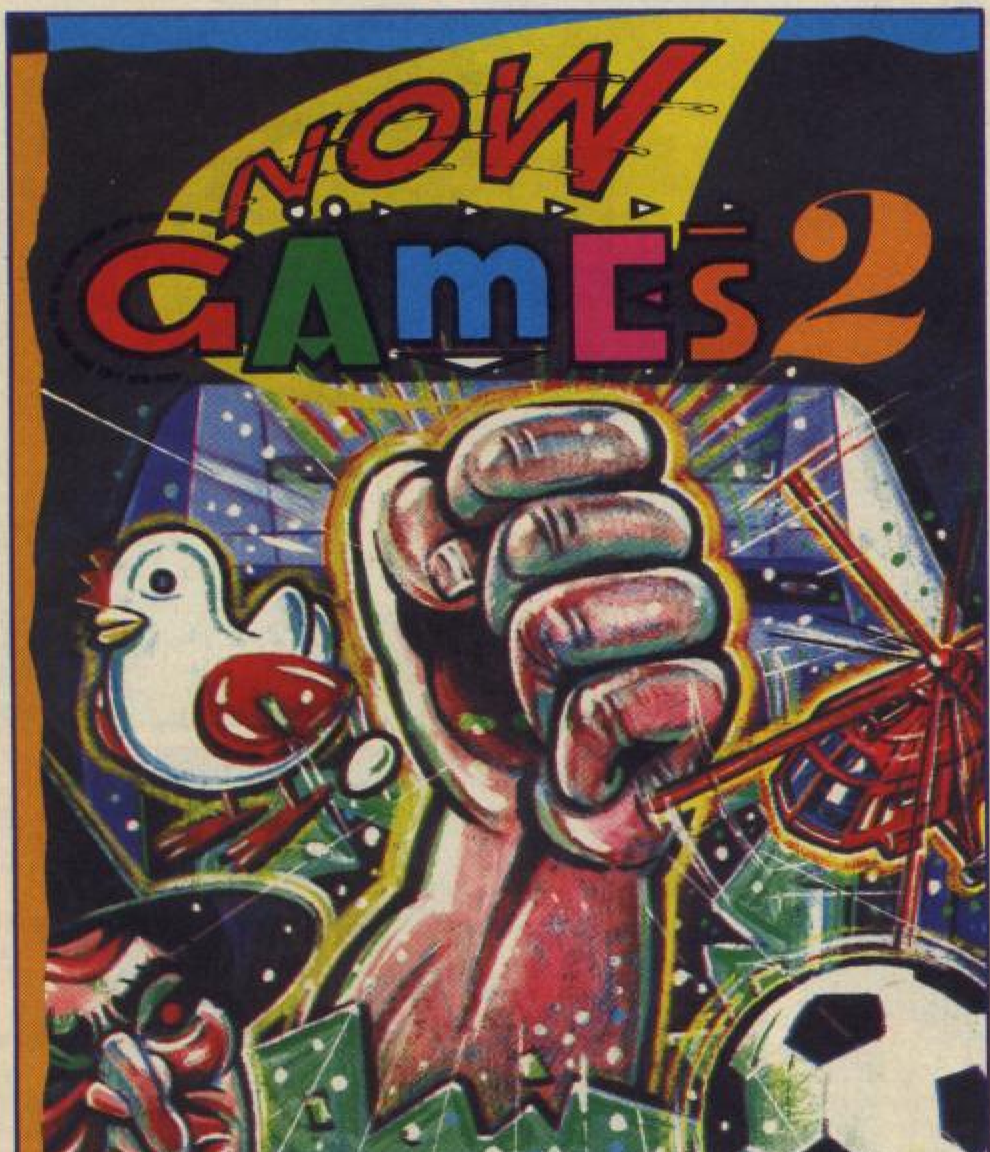
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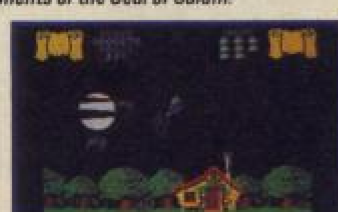




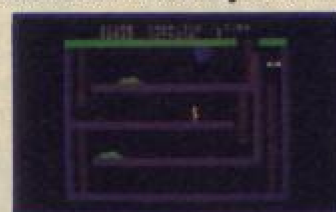
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SCREEN SHOTS

That motley crew *Rick Robson*, *Rachael Smith*, *Steve Malone*, *Luke C.* and *Alison Hjul*, are back with their joysticks at the ready to bring you a bumper collection of the latest games.

BACK TO SKOOL

HOT SHOT

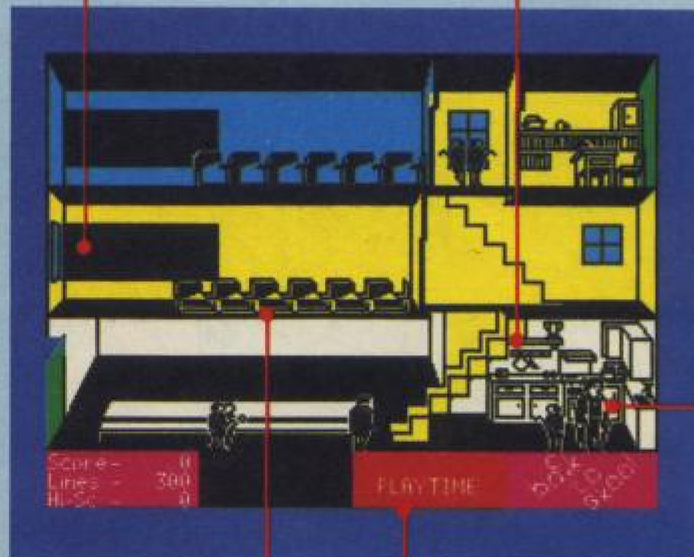
Microsphere/£6.95

Rachael Oh God, 'orrible Eric's back! Why they didn't expel him at the end of last year I'll never know — he makes that Adrian Mole of 4C look like a saint. But he didn't end his Skool Daze when he stole his report and now he has to sneak it back into the headmaster's safe. That's not just a question of catching masters with a crafty catapult either. Oh no, the alterations to the building have made life a whole lot more difficult and he's even saying he'll come over here into the girl's school. And do you think that the threat of lines from our headmaster will stop him? No! He'll just suck up to his girlfriend and get her to do them.

The reason he's coming over here is because the key to the headmaster's safe hangs round the headmistress's neck.... and we'll be gossipping about that behind the bike sheds, I can tell you! But the spotty little Rambo is well armed and he thinks it's funny to release a frog or a mouse here.

Blackboards are for writing on. In fact, they're the only way to enter the combinations that free the bike and open the biology store.

How to deliver an amphibious chapeau. Drop the frog in here then topple it onto the head's head with a catapult. Sneaky, huh?



Miss Take, our headmistress, and woe betide if she catches you here. Mice can provide a satisfactory diversion though.

Every school has its timetable — and chances are Eric will be ignoring it. However if he gets caught he'll need to go at double speed because the lines add up if he dawdles.

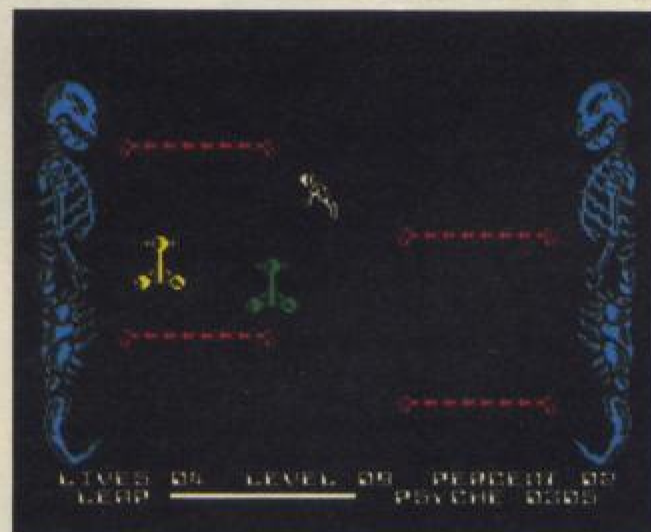
You'll find armoury scattered around the desks. When you first enter a room try as many as possible before others occupy them.... and don't forget the girls' school.

SOUL OF A ROBOT

Mastertronic/£1.99

Steve Despite its title, this game is not a philosophical discourse on whether a machine has a soul — score 100 points for each deterministic fallacy disproved. It's instead one of those games where you enter the lair of an evil genius in order to save mankind.

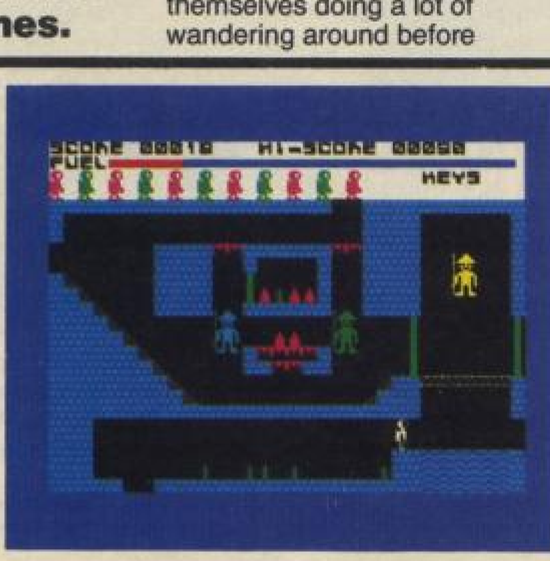
On the face of it, Soul is an ordinary arcade adventure featuring Mastertronic's improved graphics. There's the usual series of obstacled rooms to get through, filled with mobile nasties, and commands to fire and pick up useful objects. However, you won't get out of a section until you find the key. Since both these objects are fairly well hidden, players might find themselves doing a lot of wandering around before finding them.



Luckily, the constant buffering you get from the nasties doesn't mean you lose a life, it just diminishes your energy. But be warned! I had to restart the game when my robot got itself stuck between a platform and a spaceship!

Graphics
Playability
Value for Money
Addictiveness
6

CAVES OF DOOM



Mastertronic/£1.99

Alison Imprisoned in a maze of caves, embedded in the planet of Doom, you must collect five keys to escape the evil clutches of the villainous Lord of Darkness whilst avoiding the usual selection of traps and nasties.

Well, if that induces the same feeling of impending comatose in you as it did in me, you'll be surprised.

Caves of Doom, with its little boiler-suited hero, may look like a poor-man's *Jet Set Willy II*, but it's a battle of dexterity and wits as you zoom through forty locations, dodging marauding minions, in pursuit of your ultimate escape.

Well, I'm told there are forty locations — I couldn't even get through half that number. Cheaper than the price of a cinema ticket, it'll certainly keep you glued to the screen for a helluva lot longer!

Graphics
Playability
Value for Money
Addictiveness
8

SKOOL

The target of Eric's struggle, the safe. 'Fraid that door remains shut till the head unlocks it.

Watering the pots makes the plants grow. Could producing a flower at the school gates win a female heart.... and help with lines?



How to conker Albert, the caretaker. Drop a stink bomb here when the head's around then knock a horse chestnut out of the tree onto the oddjob man's noggin. But it'll mean more lines.

Stairs can present a control problem unless you remember that Up or Down, if pressed early, will still move you forward until you reach the steps.

● Eric's inventory. The well equipped schoolbooy never travels without at least one mouse, some stink bombs and a water pistol.... but try to avoid the lines that appear to the left.

That boys school still looks like an ant colony and all the old masters, ugly as paintings, are back trying to keep Eric where he should be. Only Eric has to get the bike and get the teachers drunk and to do that he's got to get our headmistress's sherry — which gives him even less time for studying than before.

I've always found Eric a bit uncontrollable and there are times when he seems to be going his own sweet way. And the masters are as bad as ever. They don't give you time to move before dishing out even more lines, which might mean that Eric's education comes to an abrupt end. But on the whole I'm sure he'll live to try again, and a lot of people won't be sorry.

I will though. You see, I only know so much about Eric because.... yes, I'm his girlfriend. And if he asks me to write out any more lines I think I'll hand him over to the head myself.

Graphics
Playability
Value for Money
Addictiveness
9

ALADDIN'S CAVE

Artic/£6.99

Steve Just when you thought it was safe to go back into the Mansion, those awfully nice people at Artic have brought out another *JSW* clone.

Actually *Aladdin*, Son of Willy isn't all that bad. There are some fairly fiendish rooms to get through and Artic has added stings to the tail.

Firstly, you can change into a dolphin, genie or whatever, which makes collecting objects much easier. The old trick of picking up the easy pieces and coming back won't work on this one. If you leave a room before you've picked it clean, you lose all your other pieces.



Graphics
Playability
Value for Money
Addictiveness
5

CHICKEN CHASE

Firebird/£3.95

Rick This may be a Gallic two screen cheepo that you won't need to buy on higher perches but it's high on the pecking order of this type of game. Essentially you have to direct your petit cock round his coop, upstairs, downstairs and occasionally in his lady's chamber, where the little red rooster learns all about the bees and the humans. Along the way he must eat to keep his strength up to satisfy his Frenchmen's 'apetite'.

However, rotten rodents ranging from rats to stoats keep ripping off Madam's eggs. This harrasses the hen to the point where she wallops our game cock about the wattles. Most amusing.



Graphics
Playability
Value for Money
Addictiveness
7

GLADIATOR

Domark/£7.95

Rachael The stench of blood in the hot sun. The roar of voices. A battle where victory means freedom from slavery... and defeat means death! Never before has a game captured the spirit of Castle Rathbone so well. *Gladiator* may be set in a Roman arena but the mechanics are much the same. And above all the bloodshed sits Emperor Ed, the man who can give the thumbs down to our efforts.

Domark's addition to the D.S.D. (Do Someone Damage) genre is divided, like Gaul, into three parts. First you can watch a bout or two in the arena, perhaps laying the odd bet, though you'll have to do this in pence rather than denarii because the gambling option isn't any more than a flashing message saying 'Bet Now', as far as I could see. Despite the cheeky suggestion that betting is a programmed part of the game it's a compliment that the fights appear realistic enough to make them worth watching.

Once you've lost all your change by buying Gladiators it's time to practise in the woods. Choose the two player option then leave your opponent static as you dance



around him before dealing a nifty thrust with a sword. Or a spear or dagger, or throw a net, or whatever, because equipping yourself for combat from the complete classical arsenal is an important part of your preparations. Then it's back to the arena for the best of three falls and the emperor's thumb, which turns at the end of each combat.

It's an interesting addition to combat games with 25 moves available, though the pre-production copy's method of control, using two prods of the fire button for some blows, is highly unsatisfactory. While Domark promises to replace it, the alternative remains to be judged. Providing it works better than this it should give you real involvement with your fighter. I felt cheated that two player combat is not available in the arena so, in this mode you cannot win your freedom.

Perhaps not the most enduring of games, but with superb animation, it's certainly different and it gets my qualified thumbs up.

Graphics
Playability
Value for Money
Addictiveness
7



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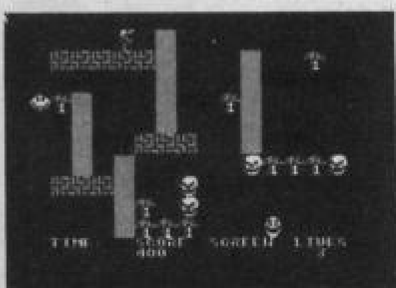
Luke Here's yet another additon to the long line of *Manic Miner* clones where the game's addictiveness more than compensates for the lousy graphics.

As the Rockman, you have to tear around the screen eating mushrooms and avoiding the ghoulish smiling faces that seem to follow you wherever you go. I say 'seem to follow you' because they do have quite a strict routine of movement which can, after a while, be predicted.

Rockman can move incredibly fast when he wants to, but he can also be controlled accurately.

Once you reach certain levels, you're assigned a password which means you can bypass the easy and familiar levels and start on unknown territory right away.

Overall, not one of the best arcade games I've seen but, if you're looking for a game to while away an hour or two, *Rockman* comes highly recommended.

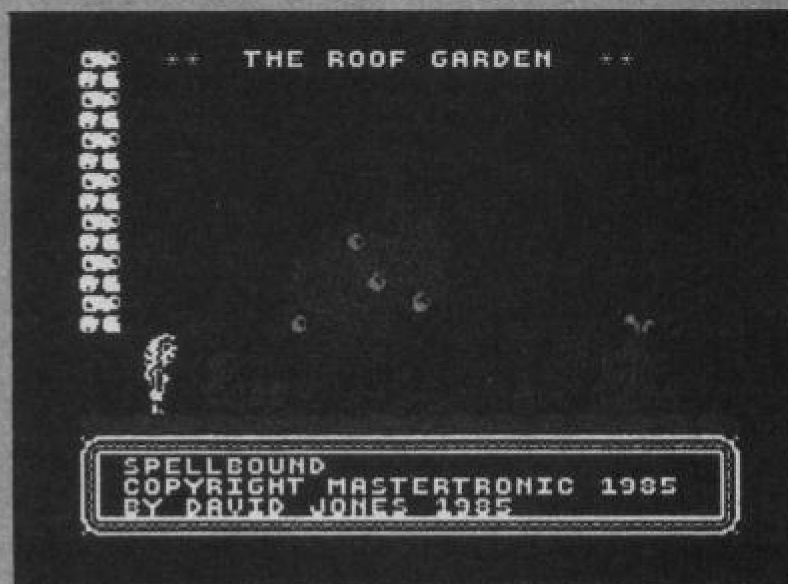


Graphics
Playability
Value for Money
Addictiveness
8

SPELLBOUND

Mastertronics/£2.99

Rachael *Finders Keepers* was the game that proved that budget need not mean cheap and nasty. While it lacked state of the art graphics it was playable way beyond its £1.99 price tag. Now here's David Jones again, with our old friend Magic Knight, and a far better looking game, but at a higher price. A whole pound more! Questions will be asked in the House because, despite the 50 per cent price increase.... this is probably even better value!



Now we are talking larger sprites, though with no less charm; more detailed settings, with less of the platforms element; and a far more complex game but one that is wonderfully playable.

At the heart of *Spellbound* are the nested menus, summoned by Fire. Using them you can pick up, drop, examine, read, interact with characters, throw things.... in fact there seems to be an option for virtually every situation! Just as in a traditional adventure you spend a lot of time searching for objects. You'll always need to check what you're carrying because many things contain clues. The speed of the menu system makes this almost effortless. And it won't take long to discover that some objects, however fishy they may seem, can be very helpful!

But to the plot. As Magic Knight, you have to enter the castle of that mad, bad mage, Gimbal who has got his necromancy in a twist once again. And as well as trapping himself in a soul bleaching spell, he's taken seven other highly individual characters with him. You must free them as well as the incompetent illusionist before time runs out. This is all presented with a wonderful selection of logical puzzles and humorous touches and even the odd bit of arcade action thrown in for good measure.

It doesn't take the Crystal Ball I found in the lift to predict that this will be at least as big a success as Jones the Programmer's previous chart topper. But the really crucial puzzle I still can't solve is.... how do they do it at the price?

Graphics
Playability
Value for Money
Addictiveness
8

BARRY McGUIGAN'S WORLD CHAMPIONSHIP BOXING

Activision/£7.99

Rick Our 'Enery'd enjoy this one. Activision's made a noble effort at presenting the ignoble sport for the small screen in a game that puts as much emphasis on the pre-fight training as it does on the bruising bout. You play both trainer and boxer. So it's brains as well as brawn that'll decide whether you're champ or chump.

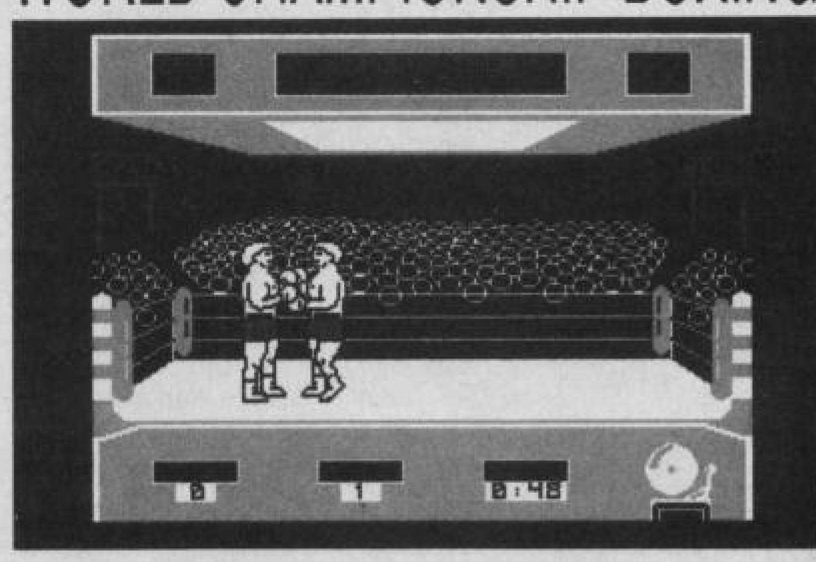
Your first task is to create your own boxer. You have the technology, but do you have the imagination? He can be endowed with all sorts of qualities — not just the obvious ones of stamina and strength but also image and attitude. You can even choose hair colour.

Through the promotor (who will appreciate your rapidly rising winnings) you can choose your opponent — either from the title contenders or the new pro-listings. The further up the listing you go the tougher your fight. Aware of his qualities, you can have up to twelve weeks in the training camp, where you have to choose how much time to spend on each part of your program — light bag, heavy bag, hand bag, weights or whatever.

Let's hope you get it right 'cos now it's the Real Mcoy. A bout can last up to twelve three minute rounds. You're able to use a good number of pugilistic punches and counters — and again you'll have to decide your best strategy — keep your guard up or go for the kill. Beware — three clean blows could mean the end of the bout.

My only minor criticism is the lack of manoeuvrability — the boxers scuttle crabwise about the ring. And where's the skipping rope in the training camp? No wonder these boys aren't so light on their feet! All in all a top-ten contender in the software boxing championships.

Graphics
Playability
Value for Money
Addictiveness
8



COSTA CAPERS

Firebird Software/£7.95

Luke Call this a holiday? It's more like a nightmare!

Poor ol' Ted has lost all his luggage on his way to Spain, and he's first got to find his credit card and then buy back all his belongings... especially his camera so that he can take snapshots to show his workmates back home. Drinking cans of lager help him in difficult moments... but a drunken Ted is not easy to control, and the hangover's even worse!

At first sight, *Costa Capers* really looks the biz. Modelled on *Jet Set Willy*, there are loads of screens cluttered with various nasties as well as useful items, such as parasols to keep the sun off. Trouble is, you can't tell which objects are useful to pick up and which ones kill you — you often just have to lose a life to find out and then remember which objects to avoid. The programmers have also opted to include the 'die for ever' syndrome from *JSW*, in which you keep falling through screens to your death. (If you get as bored as I do with this, an undocumented tip is to press the Break key and return to the beginning.)

Another little tip is to switch off the accompanying theme music as soon as you can — playing *Costa Capers* with the plaintive strains of *Viva Espana* in the background is no fun at all!

Overall, the idea of *Costa Capers* is an awful lot better than its execution.



Graphics
Playability
Value for Money
Addictiveness
6

COMMANDO

Elite/£7.95

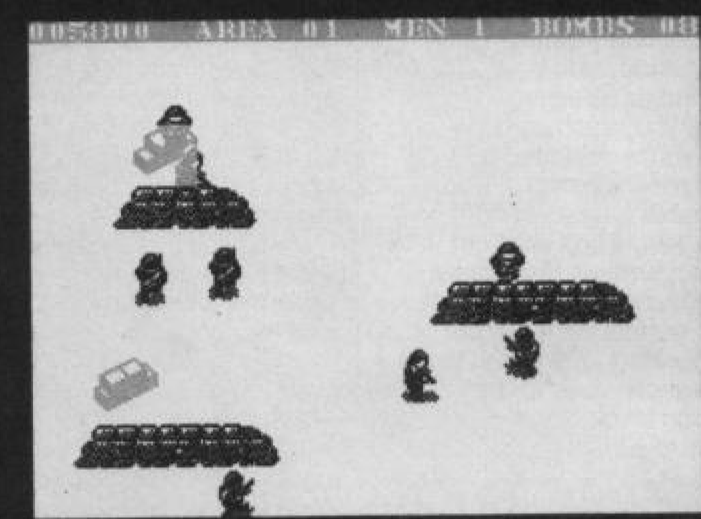
Alison If you've started to miss those mindless shoot'em ups that marked the start of Speccy game playing — you'll be dying to have a crack at *Commando*. Super Joe is the ultimate killing machine, his sole mission to wipe the enemy forces from the face of the earth. And he's armed only with his sub-machine gun and six hand grenades.

The game is an almost exact copy of *Commando*, the arcade hit. I say almost, as the programmers were forced to leave out some of the little touches from the original — like the chopper that drops our hero off at the start. The only thing you may miss is the sound — the taktaktaktak of the machine guns and the kerpow of the grenades.

Once on terra firma, the game's the same — it's kill, kill, kill all the way to the end. Then it's straight back to the beginning where the slaughter starts all over again.

There are no real rules — just get in there and blast away, slaying the stormtroopers, gunning the grenadiers and blowing up the enemy battalions. Your machine gun's got unlimited fire power so spray those bullets about like a man with no arms — and after an hour or so's keyboard bashing your arms'll ache so much, you'll wish you didn't have any either!

The graphics are really neat but you'll hardly have time to admire the scenery — hang around too long in one place and the enemy sends in the heavy mob.



Commando won't stretch your mind and if you've got a downer on mercenary militarism then give it a miss. But if you like your shoot'em ups simple, they don't come much simpler than this. Play it and blast away a few brain cells — yours and the enemies'!

Graphics
Playability
Value for Money
Addictiveness
9

INTERNATIONAL KARATE

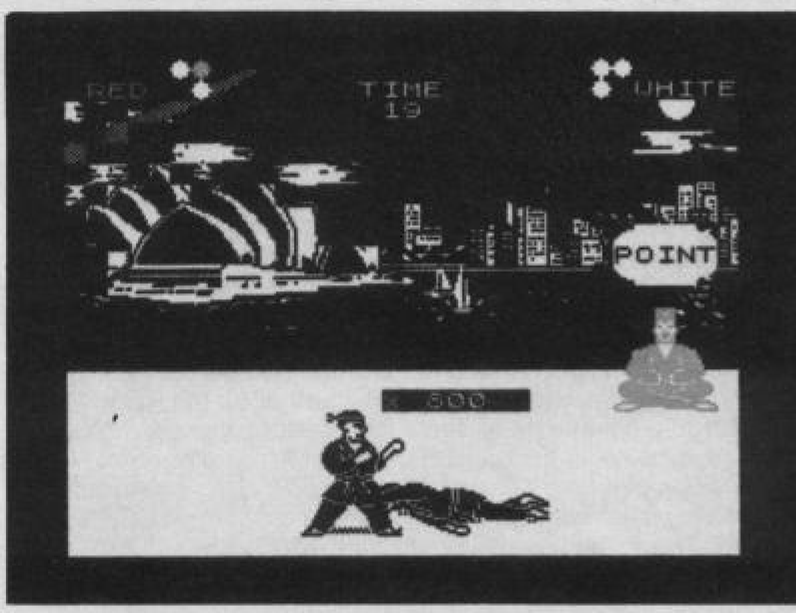
System 3/£6.50

Luke With so many games based on the thrills and spills of the old Kung Fu movies, *International Karate* is definitely a worthy attempt at being the best.

Animation's fine, but the backdrops of the various countries you fight in get pretty boring after a while. But then graphics isn't what the game's all about. Clobbering your opponent hard and fast's the aim of the game... *International Karate* has its Bruce Lees positively leaping all over the shop!

The fighters can choose from sixteen different movements but, as you can imagine, the logistics of carrying out these sophisticated moves — especially in a two-player bout! — is more than a set of weary fingers — or even a jaded joystick — can contemplate.

The judge of the fight announces — yes, the



program speaks... and it's almost understandable too! — the scores, and puts the players back to the starting grid if the fighting gets too silly.

It's an enjoyable game — but getting the maximum out of your fighting figure is a little difficult. All the same, it's fairly addictive and, if you just restrict yourself to a well-chosen routine of kicks and punches, you can generally get good enough to fight your way through the levels.

Graphics
Playability
Value for Money
Addictiveness
7

SURFCHAMP

New Concept/£11.95

Rick Wax down the three-fin thruster, break out the factor five and the Ray-Ban sunnies, surfies... mmm, zinc oxide is *so* becoming.... This is it, the Big One, New Concept's square deal surf game *Surfchamp*, endorsed, no less, by the Irish Surfing Association — are they the one's who looked for a downhill lake for the water skiing team?

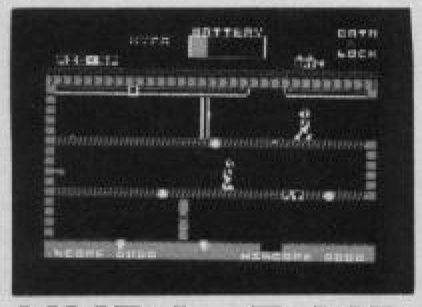
Credit where it's due. This really is a whole new concept in computer games, centred around the new Dublin based company's tactile interface that makes a joystick redundant. Well, in fact, it's a bit of plastic shaped like an ironing board you put on top of the keys. Then instead of pumping keys you simulate the movement of a surfboard — with your fingers, not your pins, you understand.

Titter not. It's not as silly as it sounds. In fact, for your average player it's too much like surfing and not enough of a computer game. A lot of time will be spent just paddling out looking for a wave and then mastering the skills to stand up, ride it, aerial, hang five and hang ten. Multiply this by weather variations, choice of board and gear (five of each) and you'll see there is plenty of game variation. There's also a choice of a ten speed practice mode or actual competition (with real life compo possibilities). And you've got to put your vital statistics in to increase the lottery.

So, nottalotta people might like this, but I loved it.

Graphics
Playability
Value for Money
Addictiveness
7





HYPA RAID

Atlantis/£1.99

Rachael Platforms and ladders provide the basis for *Hypa Raid*, but as it's at a budget price we need not complain. It's a case of completing screens by travelling from floor to floor via teleport lifts, opening doors by walking across panels with your fire button pressed, or pushing buttons on the walls and collecting pieces of an object — all while avoiding the wandering baddies. Later rooms include booby traps, which can only be crossed when they flash blue, and teleports to other rooms.

Those with an eagle eye will have realised that I've only described this in the most abstract terms (thought I'd slipped up, huh?). That's because I quite like the game on this level. What I don't like is the plot that's been tagged on. 'The Russians have built.... a MIG Starfighter.... As a top CIA Agent.... you are the natural choice to.... save the West from Russian domination.' Gee, well, it's quite a thrill to be helping Uncle Ronnie further his Star Wars project and ensure that those Reds have no counter measure.... I don't think.

Graphics
Playability
Value for Money
Addictiveness
7

SWORDS AND SORCERY

PSS/£9.95

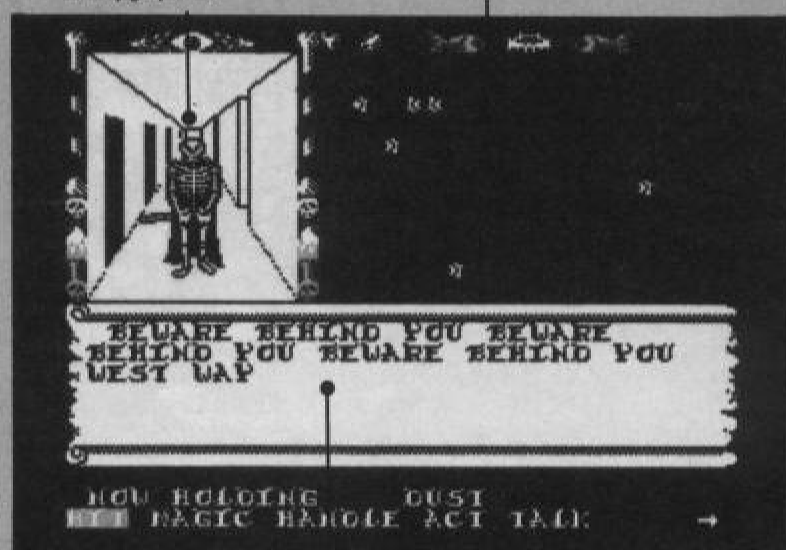
Rachael Through the mists of time in the dim and distant past a proclamation was made throughout the land.... Yea, verily, PSS will produce a true computerised role playing game and it shall be called *Swords And Sorcery*, to follow the alliterative vogue. But as time passed many scoffed and said that such a task was beyond the heroes of the age. And then one day the clouds rolled and the heavens thundered and the earth shook and the postman delivered a package. Only two years late *S & S* had arrived.

The great thing about *Dungeons and Dragons* and the like as far as I'm concerned is that they fire the imagination and draw you into a convincing world created by the games master. A lot of that involvement comes from playing with like minded people (or for those who have never become involved, loonies). Obviously you loose that element with only the hum of the computer to keep you company.

Role playing games are also notorious for the involved mechanics of running a world; constant dice rolling, looking up tables and consulting charts is conducted by the referee. But a good dungeon master will make it all look effortless and create an ongoing narrative with the players. Again the computer fails because the cluttered screen is far too busy. Familiarity will help you accustom yourself with the revelant windows, but even then I'd have preferred less of the bones showing.

The visual display. Here's a skeleton who's mindless, antagonistic, and illustrated in rather blocky graphics.

Here's your map, showing where you're going and where the wandering monsters are.



The best part of the game. Your chance to threaten the nasties with the cutest curses going and they can give as good as they get — only too few to choose from!

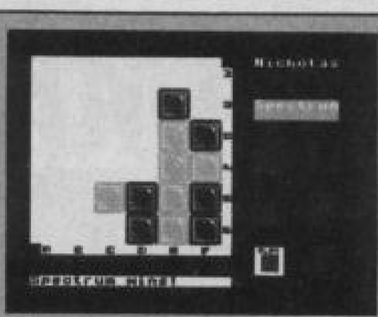
The scrolling action menus which are surprisingly easy to get into and amazingly versatile. But beware — eat without first dropping your sword and though you'll be told it wasn't edible it'll have gone!

All the latest news, from what you're carrying to how that last jab with a sword did. During combat you'll find your eyes crossing as you try to watch this, the command menu and the status panel all at once.

Above all though, the dungeon should be believable, and it's the curse of bad players to create chamber after chamber of monsters. Unhappily the computer reproduces this 'hotel corridor' syndrome perfectly, replacing subtle traps and vivid description with continuous battles.

Not that it's all bad, and I'm sure *S & S* will become a cult of sorts. There's room for better dungeons as later levels are added to the core MIDAS system. And the true spirit of the game starts to come through if you get a chance to indulge in a little casual conversation with a monster before combat — the battle cries and insults are great. You also train your warrior at the start in various skills and attributes can be increased. But in the end I found it all too mechanical to do what it set out to, which is indulge the player in role playing.

Graphics
Playability
Value for Money
Addictiveness
7



THINK

Ariolasoft/£7.95

Alison So much for good old fashioned thinking, you'll need a PhD in applied mathematics to get one over the computer in this souped up version of Connect 4. Well, at least that's what I thought 'til the Ed thrashed me... so what better incentive to persevere with the game?!

It all sounds pretty mindless — get four counters in a row on a six by six board. But, although it's easy to learn, it's a devil to master.

You can only push your counters in from the bottom or right of the board and, to heighten your frustration, as soon as you make a move, all the counters on that row or column budge along one.

But, just to ease things along, Ariolasoft has provided not only natty little icons with which to select the type of game you wish to play but also a tutorial mode where the computer will only let you select winning moves. Trouble is, on the lower levels, since the computer refuses to think ahead, the game's likely to get itself into a loop as you both place your counter in the only conceivable winning position!

If you're into zapping and killing, give this one a miss — strictly one for the strategists.

Graphics
Playability
Value for Money
Addictiveness
7

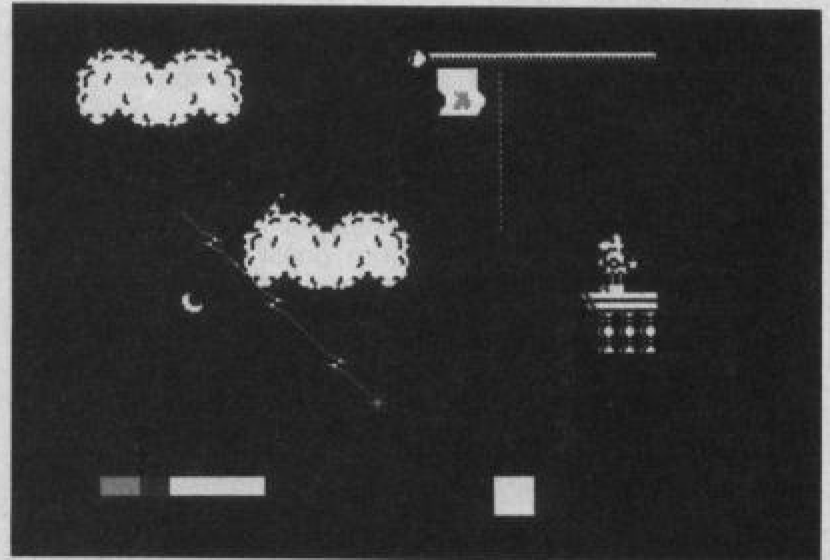
SIR FRED

Mikro-Gen/£9.95

Rick Mikro-Gen's *Sir Fred* has nothing to do with running an airline but a lighthearted adventure set in medieval times. It should provide a surfeit of laughs for even the most surly of Speccy users.

Your quest, as Sir Fred, is to rescue the damsel in distress. Although you'll get to see her you won't know in which of the seven rooms she's held — until you've completed the whole adventure. What's more, each time you start a quest, the computer will select any one of fifty-eight game patterns. This gives you plenty of game play option — and plenty of objects to seek and use in your mission. Some can be used once, some over and over again — do you really want to?

A sirtain sirprise is Sir Fred's amazing gymnastic abilities — despite — all his armour! He runs, jumps, swings on ropes and swims realistically. His in-built inertia means he gets puffed, falls over and drowns pretty realistically as well! He's a crack swordsman and brill



bow man. Makes yer sick, don't it — no wonder he always gets the girl...

There's not a lot you won't have seen before, but it won't always have been so well packaged. The graphics aren't cosmic (nor medieval, mind) — like the game it's good and solid. You could well while away a few knights with *Sir Fred*.

Graphics
Playability
Value for Money
Addictiveness
7

WILLOW PATTERN

Firebird/£3.95

Rachael Perhaps somebody should tell Firebird that it isn't all Fu Manchu and Chow Mein east of Dover. Their latest game includes Chinese Mandarins and Japanese Samurai, all out to stop our hero. He must be a mighty important guy to have the whole weight of the orient thrown against him as he



indulges in that cliched quest to rescue a princess.

Traditional Japanese houses have paper walls. The same goes for this game because behind the admittedly pretty graphics lies no more than yet another maze game, and one that's tissue thin at that. Its major gimmick is a stone jumping routine that's so easy that the few times you do fail it will be because you're nodding off.

Difficulty comes in the hape of the warriors who lock your path and must be isposed of by knives found ying around. The fact that nere are barely enough of hese makes life harder. But lon't throw one then dodge off screen to avoid the Samurai's sword because you'll have wasted a weapon — they don't carry through. With scoring in the three figure range it won't even please the high number freaks.

Why Firebird are putting this out in the Super Silver Range I have no ideas, but Confucius, he say, don't buy this road of oliental Coberers.

Graphics
Playability
Value for Money
Addictiveness
4

3-2-1

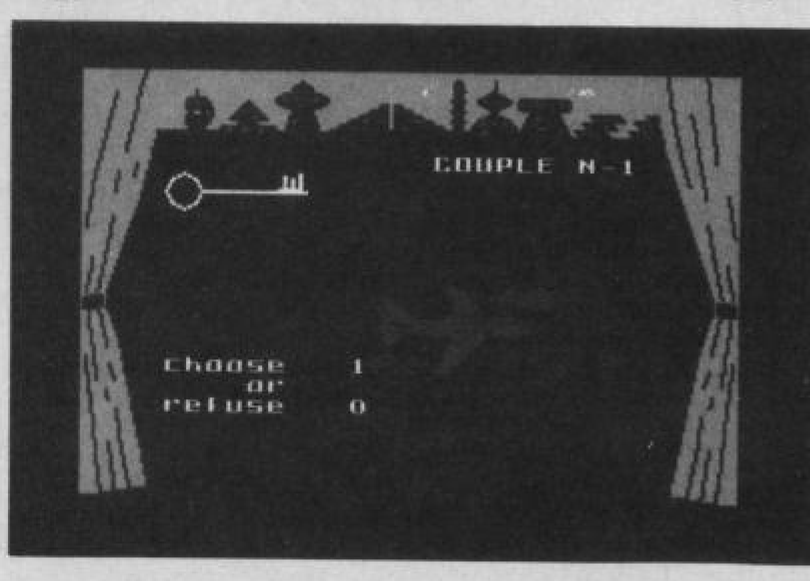
Micro-Computer/£7.95

Rick Remember how *Hampstead* starts — you're stuck in a grotty bedsit, watching 3-2-1 — it's the height of the social deprivation. Well, I've no desire to attain *Hampstead*, but Micro-Computer's cheap adaption of a cheap TV game just adds insult to injury.

It begins with a moronic True or False quiz which simply repeats the same questions with each round of the game. It moves on (though it's flattering to suggest this game has any sense of progress) with the wit and vision of a dead anchovy to a platform game of such unremitting mediocrity that I cannot even crack jokes of Ted Roger's standard to alleviate the gloom. The jolly chap chats away on the tape between sections explaining the rules. I'd never have thought I'd be glad to hear his voice!

Despite the massively inappropriate blurb the point is not to encourage family harmony via the home computer "avoiding the isolation that is so often caused by the machines that we are presented with in the modern world," but greed. By sending off your winning scores you can qualify for prizes which include a seven day holiday in Spain. And that's where all the money's gone folks — not on the program. Assign this one to Dusty Bin. It's so bad that if I was offered a choice between this and a season ticket at Highbury I'd seriously waver before buying it. The game, that is.

Graphics
Playability
Value for Money
Addictiveness
2



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GEOFF CAPES STRONGMAN

Martech/£7.95

Rachael When Castle Rathbone's very own Charles Atlas, the Ed, said that in just seven days he could make a strong woman out of me I guessed he'd bought me a chest expander! Instead it turned out to be Martech's muscle bound micro-game. Now I must confess that ever since a certain Daley Thompson was responsible for the demise of my second joystick in a weekend I've had an aversion to Sinclair sports, but they say that a healthy body makes a healthy mind, so here goes....

Unlike the *Track and Field* mob, Geoff Capes concerns himself with displays of awesome strength. He pulls trucks, chops logs, rolls cars, loads barrels and rings the fairground bell.... then he relaxes with a bit of Sumo wrestling! Or rather, you do and, sigh of relief, it's not all joystick bashing.

Obviously before you can even punch your way out of a paper bag you'll need to build some muscle, which you can do either energetically, with ten seconds of wrist action or the lazy way, by pressing fire and accepting what God gives you. You then allocate the strength between eight muscle areas, from ankles to shoulders.

Achieving each of the stunts calls for different skills. The ones involving vehicles consist of chasing the illuminating muscle icon with a pointer and pressing fire as an animated Mr Capes (be very polite here — he's bigger than me) flexes centre screen. Barrel loading sees the addition of joystick pumping and bell ringing could kill yet another Quickshot, but chopping and wrestling call more for timing. In each case you can apply more effort to the activity to speed it up though this uses muscles more quickly. As any remainder is added to muscle replenished it's worth aiming for efficiency.

It's not perfect, but it should keep a lot of people happy with its variety and difficulty. And here's a playing tip — if you really want to build muscles like Geoff's.... do some press ups while the game's loading!



Graphics
Playability
Value for Money
Addictiveness
7

ROBIN O' THE WOOD

Odin/£9.95

Luke This is a funny sort of game — and you don't realise just how addictive it can be until you've been playing it for at least two hours!

Okay, it must be admitted... there are certain cynical gamesters who might point a finger at the format of the game and mention a couple of Ultimate titles, but *Robin O' The Wood* is certainly in a category of its own. For instance, the first time I played the game, it was over 40 minutes before I realised I hadn't yet been killed and tossed back to the beginning. Not that the game's easy...

You get to play the part of Robin, hurtling around the castles, woods and open land searching for keys, flowers, and all sorts of other medieval knick-knacks. The Normans trudge around the scenery relentlessly firing off crossbows at you, but they're fairly easy to dodge and they don't do that much harm anyway. The real menaces are the red rats — they kill... and quickly too! If you catch sight of one of them rushing towards you, there's no point in trying to kill it with your spear — it's just a waste of time.

Your life energy is measured by a white strip beneath the playing area. As you suffer crossbow bolts and encounters with rats, it gradually turns mauve and then blue... which means you're dead. Of course, find the white-bearded sage and you not only gain a new life but all your ills are cured. Watch out though for the green goddess that appears out of nowhere, steals some of your treasure and naffs off.





Graphics are good and movement around the screen is both fast and smooth. And, although the screens are all fairly similar — which is how the programmer has managed to cram so many into the game — there are familiar landmarks every now and then to get your bearings from.

It doesn't really bear much similarity to the Robin Hood stories we all know and love — but that doesn't matter a bit. A great game — buy it!

Graphics
Playability
Value for Money
Addictiveness
9

BRAINSTORM

Bubble Bus/£1.99

Rachael Back in the land of arcade adventure, you control Robin-Banks, an interplanetary alien zapper who's been sucked down the plughole into Professor Brainstorm's castle. You can escape by walking, or using your jetpack, through a 650 screen maze where you collect keys and special weapons to do away with the eight guardians.

All fairly standard stuff, though nicely done, as you'd expect from the ever improving Bubble Bus. There's a nice touch too in the use of momentum when steering Robin, and loss of life results in him flying around like a burst balloon.

So far, so good, but either I'm losing my touch or the game is just too difficult. The problem lies in the Clone's 28 varieties — that's almost half as many as Heinz! — whose ability to fill the airspace is worse than jets at Heathrow. Though they're easy to kill there're so many, and they replenish so often that it's nearly impossible to avoid them, even while shooting. What I saw I liked but its sheer difficulty eventually made me lose interest.

Graphics
Playability
Value for Money
Addictiveness
6



HACK FREE ZONE



He's back — Hex Loader — that hex fiend hextraordinaire, with more hexcellent hints'n'tips for fast hack free action.

Click, bzzzzzt. Ow! I must get that chip fixed. It's givin' me gyp, I can tell you. Anyway, how the hell are ya? Awright! Good. Now, to business. This time I've been getting a lot of comeback (Keep them letters comin', chummies!) from my pleas for mail from you carbon based gamers. I'm pleased to say the response has been staggering. Well, Pete staggered in with the sack, anyroad.

Pushing right off, we have a note here from one **Andrew Menzies** of Bradford. **"I thought I'd send in a few tips..."** *About time too! Sorry...* **"Here are some codes to tap in to *Frank Bruno's Boxing*: (Use the name AND)**

Boxer 2	Code	MM710F49B (FUNG CHOP!)
Boxer 3	Code	B7XI00L05
Boxer 4	Code	FK5IN0A07
Boxer 5	Code	CE9IN9817
Boxer 6	Code	IHCIN96A8
Boxer 7	Code	ML6ION4B6
Boxer 8	Code	BFAINN2L5

To see the final effect, enter the code CGAINA5CA"
Thanx a squillion Andy. Now I can really take it on the jaw. (BIFF! Argh!) If I had one, that is...

I left you all in suspenders last month by giving you half **Keith Gronneberg's** *epic solution to* Fairlight.

Hah! Powerrrrrr! Ha-ha-ha. Oops. Erm. With no further ado here is the final solution.

"Take the Book of Light, two small stoppered bottles, and the cross hidden under the throne, to the room with the monk standing at the top of the stairs. Drop the cross in front of him and push it at him — he'll disappear. Do the same with the next two monks this time with the stoppered bottles. At the top of the stairs pile up a barrel and a chair, and using the Book of Light, jump into the room above. Here you'll find the key to the castle gate. If you drop the Book, the figure here changes into a monk, but this seems to be a good thing, as I've only been able to get back out with him in this state." *That's it, well, the bare bones of an explanation! This'll illustrate the difference between knowing how to complete a game, and actually doing it. (Teacherly tone or what!) But the averagely brilliant gamer should complete the game using these clues. Thanks Keith, pure gold.*

Hello, what's this? A missive from my old mate **Russell Olieff** *of Armthorpe. What's that he says? He's found loads of mistakes in* Hyper Sports? *Well, tell us about it, Russie!* **"For a start."** *(This boy means business!)* **"If you're going fast in the swimming your man freezes. And not only that, I had a strange experience in the shooting. I scored 10,100 and the computer gave me an X and I failed to qualify. The score of 10,100 also didn't become the first in the world. I was playing my best game ever with 500,000 points! The weight lifting said 240kg but I thought it should've been 260kg. So I lifted 240kg twice"** *S-T-R-A-I-N... Snap!* **"Twice, and still failed to qualify. I thought after the weight lifting the swimming would go back to 45 seconds, but it doesn't! Does anybody know what's going on?"**

Nope! Well, actually, there are two possibilities. One, your copy of Hyper Sports *is corrupted, or two, there are some bugs in it. My advice to you, my little fruit juice, is to two-step your way back to the dealer you bought it from and get him to swop it for you. Having eliminated that possibility, you're then free to have a go at the manufacturer if it continues to work against you! Okay, me old chutney?*

Right, face front! If you look across the page, you will notice we have more screen shots from my very own monitor. Cast a beady eye over the hints'n'tips therein and ask yerself a question — could I do this? Well, yes you could. If you have tips on how you became an arcade hero, a hi-score, and a mug-shot of yourself, you're in! Your score'd better be good, though. I'll match it, point for point and you'll see the results — my score against yours. Hex's Heroes. Be there or be, like me, square. You can also write to me about your current fave games.

Fave games of the month are the totally marvey I, Of The Mask *and the program which could out-Elite* Elite, Tau Ceti. *I can't leave these babes alone, and neither will you! Go get 'em, and let me know what you think.*

That's it. My mailbox is ready, my printer is powered up and ready to print out your letters (Brrrt! Roger, Hex! — Peter the Printer) and my optical pickups are polished and waiting for your words. See you there. I'm waiting... Click. Bzzzzzzzzzzz.

Buzzz, wirrp. Can Hex Loader be turned on by you? He's just waiting for your hints 'n' tips to get all charged up. But remember when you send them to include a sketch of the screen, clearly labelled with your suggestions. Hex holes out at Hack Free Zone, Your Sinclair, 14 Rathbone Place, London W1P 1DE.

HEX'S HEROES

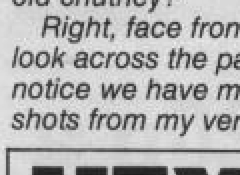
Whheeeeee! Phizzz, Phuttt... Phew, it's lucky that Pete plugged me back in, or else I wouldn't have had time to tell you about this month's Hex's heroes. Mmmmm...

Well, seasonal greeting an' all that are obviously floating around the mind of **Snowy White** *from Westbury-On-Trym who claims to have scored the big zilcho in Durell's* Scuba Dive, *'cos he melted! Seriously though (what does that mean?), Snowy managed a respectable score of 17-0 in* Match Day, *which ain't too bad for a snowman.*

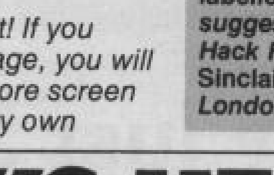
Across the water in the Needer-lance (that's Holland, huh?), **Jeroen Molenach** *(hope I spelt your name right, Jeroen!), has knocked up a wonder-fuel score of 59550 on* Pole Position. *But I think it's time for a gear change!*

Hurdie-hurdie-hur-di-hoe. Ahhh... We must be in Sweden. See de good score on Exploding Fist, *29600. Must be the wonder-haircut himself,* **Per Holm**. *Maybe his hair took that position after he bumped into a mad reindeer.*

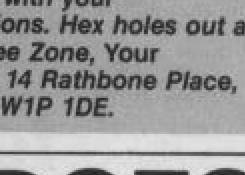
But that's all I can tell you, because I think Pete wants to use my power point to plug in the coffee machine. Two sugars please Pe...



Snowy White
Match Day/17-0



Per Holm
Exploding Fist/29600



Jeroen Molenach
Pole Position/59550

NODES OF YESOD

These tips might help you with *Nodes Of Yesod* — courtesy of Hex!

When the red astronaut appears, press the gravity stick key.

If a gravity stick doesn't appear, though, you're in tuh-rouble! Run for it!

When you play the game, collect every alchiem, until you've filled the alchiem box. You probably won't have collected all the alchiems just by going through the maze in one go. Once you've been through the maze, go through it once again. This'll give you a higher percentage, and a better chance of winning.



• When you have the eight alchiems, go straight to the equivalent marker alchiem. You'll fall down a hole and come face to face with a monolith. Gasp! Walk into this, and you'll have won! Yee-ha!!!

Try and keep the marker alchiems to the right of the box. If your useless alchiems are on the left, the red astronauts will take one of them, leaving your stash of markers untouched!

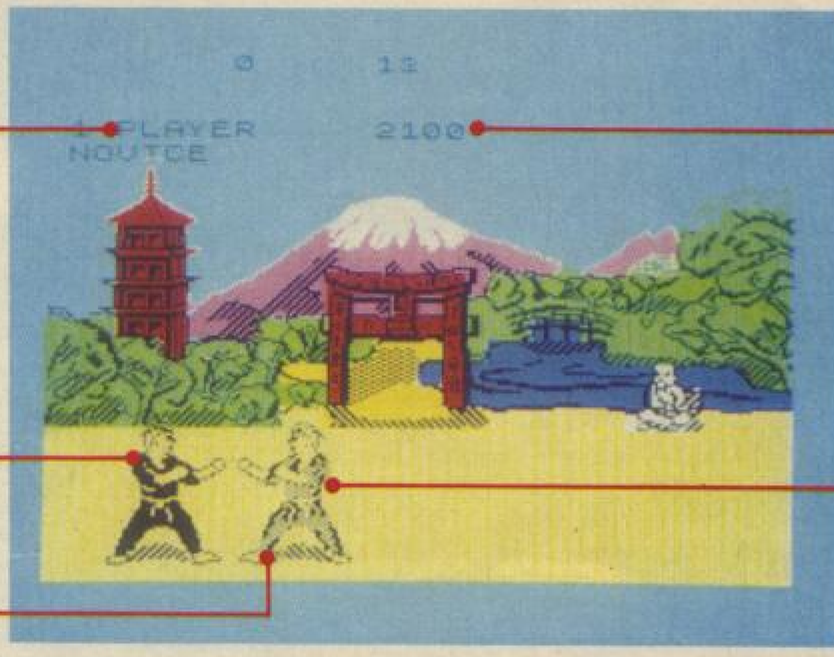
WAY OF THE EXPLODING FIST

Way of the Exploding Fist punched in by Graham Cairns

How to cheat the hop! First switch the game from One to a Two player game. Then, as nobody's operating your opponent beat the living ping-pongs out of him. Unethical, yes. But enormously satisfying!

This is you. Now, kneel down and lunge out, punching him when he's in range. This works with almost every opponent of every Dan.

Another good move, if you're a little bit tired of being beaten to a pulp, is the low sweep of the leg. This topples your opponent, no matter what colour belt he is.



Hi-score equals 10th Dan for the 36th time.

This is Dan. He's not invincible — first take three steps toward him.

BEACH HEAD

Kevin Matthew of Middlesbrough, Cleveland, gets tanked up for *Beach Head*

When shooting the planes, don't hold the trigger down or use an auto fire. Let your ammunition build up when the sky is relatively clear.

• Should you decide to fight on land don't shoot the tanks and move straight away. The other tank will follow and you'll miss. After firing try and hold your course.

• If you're on your last shot, but have three or four tanks left, don't hit the fortress. Run your tanks through the system toward it. Try to avoid hitting it until you're down to your last tank.



In the ship to ship battle, the carrier is usually at 48 degrees, the little ship on the extreme right is at 24-28 degrees and the following one at 69-73 degrees. On the extreme left you'll find another ship at 59-62 degrees, and finally one at 54-58 degrees. This is the best order to hit them in 'cos this is the order they fire.

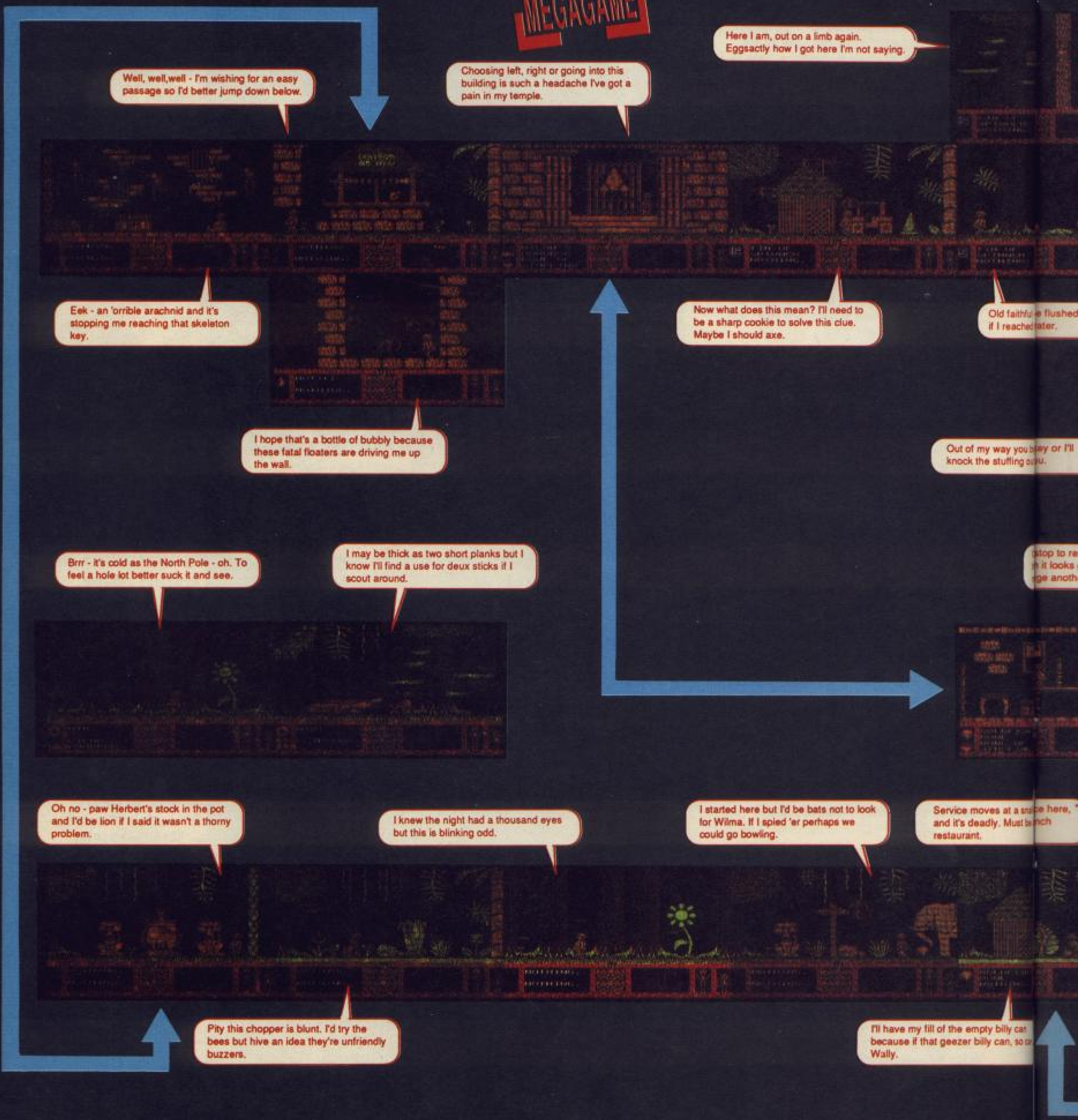
FINE YOUNG CANNIBALS

Prepare for a taste of Paradise — only trouble is the Weeks family is on the menu. But rather than make a right Wally of yourself, read *Rachael Smith's* review of *Three Weeks in Paradise,* the new feast from Mikro-Gen. Dinner is served!

YOUR SINCLAIR MEGAGAME

Every year thousands of wallies go on their hollies, but there's only one Wally and neither he nor the missis nor even Herbert, the nipper, come within that notorious 18-30 age range. So Wally, being wally, decided on a pleasure cruise... on the HMS Pedalo!

Eventually the gormless mariner was washed up on a desert island, and when the natives said come to dinner he was thrilled. But he didn't realise that the first course was to be Boiled Baby followed by Sautéed Spouse. And as Wilma's always been a game old bird they were keeping her hanging around first. Her parting cry was to call her hubbie a stupid pudding, but that was the last



thing he wanted to be — and he was already hot-footing it into the jungle.

And that's where this episode in the Wally saga begins. You're helping him rescue his family and stopping him getting... sorry, becoming somebody's just desserts. You just have the man (man?) himself to control this time, but other features make the game an advance.

Instead of just swopping objects you can now choose to pick up and drop things as well as having to use them in the right places. That means Rambo-wally's rescue mission calls for even more ingenuity. There's also a nice selection of puzzles, from the fairly obvious to the maddeningly difficult, but they all depend on acute lateral thinking and horrible puns.

In return there's less of the arcade element this time with fewer things to dodge. But the thing I liked best about *Three Weeks* was its humour. There's a speech bubble *Ouch* as he rubs his behind. And look out too for the scrolling message line at the bottom of the screen that conveys some screamingly cryptic clues, as well as the family's cries of help.

And finally fed up with reviewers' constant grumbles about attribute problems, Mikro-Gen has included the option of switching off Wally's colouring.

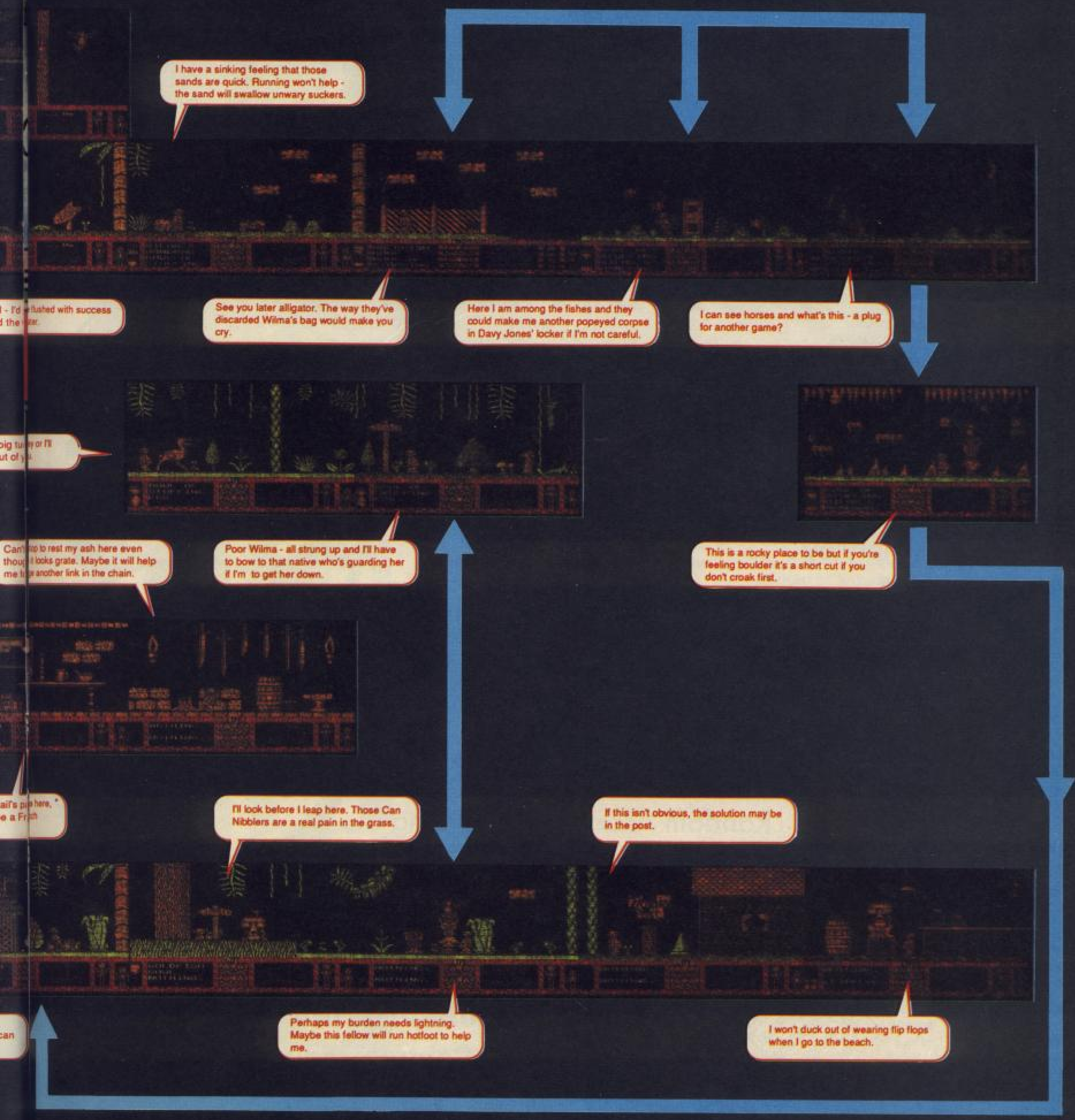
A word too for the music — it's great, and it adds a lot to the humour. A great game that just goes to show that even if he's too old for Club 18-30, Wally's not past it yet.

FAX BOX

Game	**Three Weeks in Paradise**
Publisher	**Mikro-Gen**
Price	**£9.95**
Joystick	**Sinclair, Kempston**
Keys	**Alternate** Top Row **Left/Right,** Bottom Row **Jump,** Middle Row **Go Into Screen/Swim/Shoot/Climb/ Use Object, 1/2 Pick Up/Drop Object 1/2**

Graphics
Playability
Value for Money
Addictiveness

9



YS BUBBLE COMPO



CHOP FUEY!

D'you fancy yourself as a real ah so? Well here's your chance to win a Kung Fu suit or one of 30 copies of Durell's games — then you'll be Kung Fu fighting!

Ah so! What's this? Another hiiii yaaaagh, chop suey, Confucius he say, velly velly amazing competition for *Your Sinclair* readers to enter. Yes, in conjunction with Durell Software we're offering three genuine Kung Fu suits for the lucky winners. And if you're not into Kung Fu you can always use them as pyjamas!

Stop ninjing you at the back, even if you're not a winner you've got the chance to win a Durell T-shirt and a copy of one of its games — that's right, any one of its games. Happy now?

The master of Kung Fu, Bruce Lee has been known to utter words other than Ho Lee Fook! What do you think he's saying in the picture above? Okay grasshoppers, jump to it. Fill in the speech bubble and send the whole caboodle to Kung Fu Fighting Compo, *Your Sinclair,* 14 Rathbone Place, London W1P 1DE.

Cutting remark: If you don't want to spoil your issue don't karate chop this page use a photocopy instead.

RULES OF THE MASTER

Employees of Sportscene Specialist Press and Durell are not allowed to enter this competition and neither is Lee Van Cleef, The Master.

Entries must reach us by March 31st 1986 — Year Of The Gerbil (no not Kevin the gerbil).

The Editor's decision is final and no amount of arguing will change his mind. *(Unless of course you're a Black Belt! Ed)*

SPECIAL FRIED COMPO

Name..

....

Address......................................

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....

....

....................Postcode ....

If I'm one of the lucky runners-up I'd like the following game:

- □ **Turbo Esprit**
- □ **Saboteur**
- □ **Critical Mass**
- □ **Combat Lynx**
- □ **Harrier Attack & Scuba Dive (Two games)**

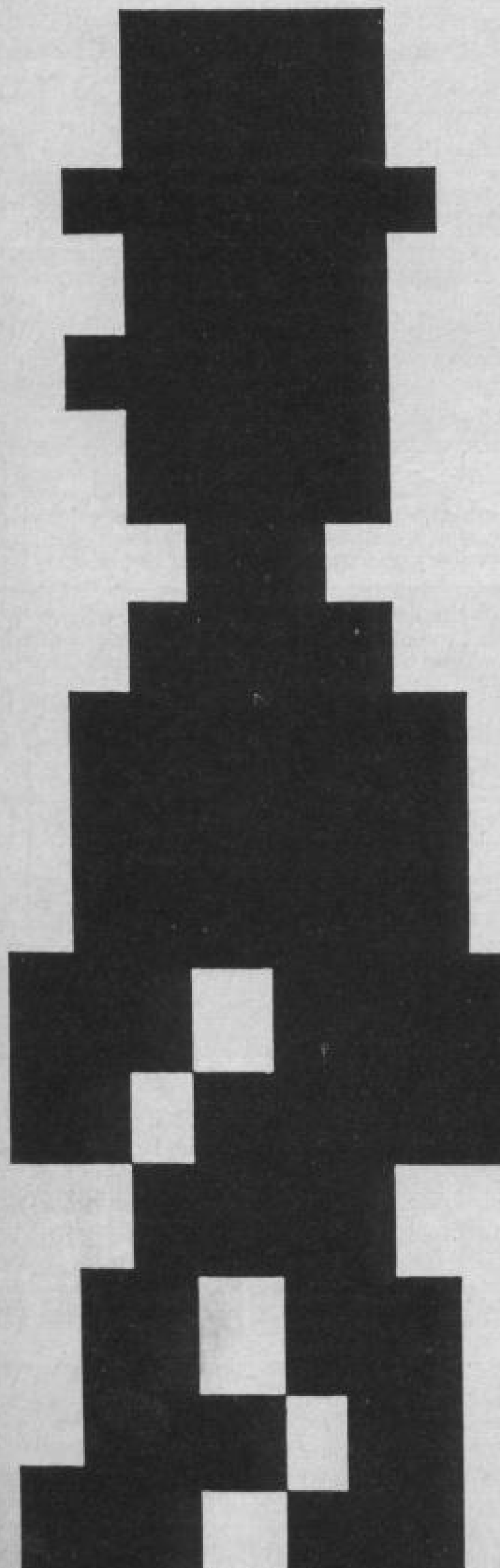
Please tick the appropriate box

Words: Tommy Nash
Photo: Jed Murray



Show us your Willy!

"I s'pose there's not much sex in Jet Set Willy. Maria's a bit on the stocky side and as for Esmerelda, she zaps you when you touch her."



Matthew Smith isn't the tidiest of programmers. Take the time he went to a posh restaurant in the Sears Building in New York. No corduroys, no cut-offs, no sweat-shirts, no sandals — that was the house rules. Bit of a shame really 'cos that just about describes Matthew's wardrobe! Yep, he's a right scruffbag on the outside, but on the inside — well, that's another matter. Beneath the crumpled clothes and the hippy hair is a razor sharp wit and a phenomenal programming talent. Well, what d'you expect from the man who created every (well, nearly every) Speccy owner's favourite comic character — that's right, the manic jetsetter himself, Miner Willy.

What are you working on at the moment?
A Spectrum. *(Big grin!)*

Let's rephrase that. Is it true that you're working on *Willy Meets The Taxman*?
No comment. *(Even bigger grin!)* Oh, okay yes. I'm designing it and doing the graphics and there's a team on the programming. This time Willy's going to be taller than before — he's grown up since *JSW*.

Will it be another platforms and ladders job like *Manic Miner* and *JSW*?
There are things that could be described as platforms but they'll be hidden. And the baddies, about fifty of 'em, won't be the stupid bouncing up and down type. They'll be intelligent — well, all except for the stupid ones that is!

Is this the end of Willy as we know him?
Yep. He won't even be brought back by public demand. The platform game's finished — *JSW* was the best ever. There's no new programming ideas in this game — well, it's not really anything to do with me. They won't even program the game as I've designed it — must be 'cos I can't design properly! The only way to get results is to program myself.

So, what *are* you working on at the moment?
No comment. *(There's that grin again!)* Well, I *am* working on a project. It's not just a game — more a way of life... state of the art... fast loader... interactive... it's a mental challenge controlled by the computer and... pheweee... Everything but the game's called *Limbo* — in fact, everything's in *Limbo*. And when you stop playing, you go into *Limbo* too! It's also an expandable game so don't think you'll get away with just buying the one tape. And it'll take advantage of different Spectrum memory sizes. It'll work on a normal Spectrum but it'll use the extra memory of a 128K if you've got one.

Have you got one?
Yeah... er, no! Sorry Sinclair! I saw one on my holidays in Italy... er, Spain.

What's your favourite new game?
The only decent game recently is *Fairlight*.

Do you mind people taking the mickey out of *JSW*?
No, I take the piss myself. That's what he's there for — he's a bit like Charlie Chaplin.

Isn't *JSW* a bit like a waking nightmare?
A woken-up too early nightmare! Most of the game was planned under the influence of alcohol and written under the influence of other noxious substances.

D'you think there's anything deeply psychologically disturbing about your games. All those Willies and toilets?
No. But you'd better ask my analyst. I s'pose there's not much sex in *JSW*. Maria's a bit on the stocky side and as for Esmerelda, she just zaps you when you go to touch her. Originally you were going to have to take her to bed — and then she'd kill you. But I dropped that for deep psychological reasons. Hmmm.

D'you still live at home?
(An eavesdropper: I thought everyone lived at home.) Wherever I lay my hat, that's my home!

Have you got any fluff in your navel?
No... oh, hang on, yes there is some.

What colour is it?
Purple.

How old are you now?
Nineteen. No longer the boy wonder, eh? Not over the hill yet though!

Are you a trainspotter?
Not since I lost my paintbrush.

ART ATTACK

All artists should be hung — and Peter Shaw is no exception! His pictures may not make it to the Tate just yet but with the help of Rainbird's Art Studio he reckons he's on his way.

Now I know what you're going to say 'cos I said it myself. What? Another art package? Well, it's gonna have to come up with something a bit special if it's going to drag me away from *Melbourne Draw/PaintPlus/The Artist** (*delete as applicable). Well, prepare for a surprise. *Art Studio,* the new package written by OCP but marketed under BT's Rainbird label, has more than a few features to recommend it. The first thing you'll notice is the 'pull-down menu system' — and it's not just a gimmick but the basis of all that makes this program so user-friendly. Yes, I know that word's overworked but you'll find you hardly need to refer to the manual.

So, how does it work? Well, it prints a menu bar across the top of the screen from which you can choose a comprehensive second menu that gives you access to the feature you want. Just move the cursor to your chosen option and press fire. If a feature has even more on offer, then you'll be presented with a third and sometimes a fourth menu on-screen. If you choose to use a joystick or even a mouse, you never need touch the keyboard at all!

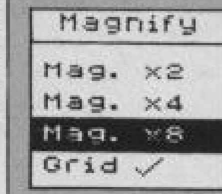
But all this is still not the be-all and end-all of an excellent art package. To challenge the current competition a new package must offer a wider range of features than the rest — and be able to perform them quickly. *Art Studio* comes out shining on both counts. In fact, it works on the Spectrum with all the charm of a program like *MacPaint* on the Macintosh. Not altogether surprising as that program was obviously the main source of inspiration for *Art Studio* — the same pull-down menus, many of the same features and all of the flexibility. Plus both programs can be operated with a mouse. More than likely you'll have come across the mouse before — it's similar to an upturned trackerball that you roll around the table top to move the on-screen cursor. The combination of *Art Studio* and a mouse will make it nigh on untouchable — and even without, the competition's gonna have to go a long way to beat such an excellent package.

FAX BOX

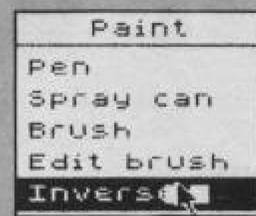
Name	Art Studio
Publisher	Rainbird
Price	£14.95



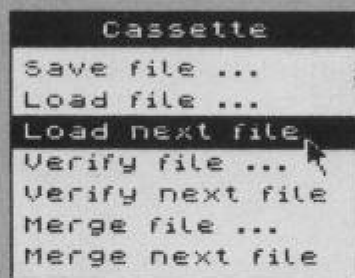
In x4 magnification you can change specific pixels without losing sight of the overall piccy. To scan across the screen, use the arrows on the x and y axes.
On the highest level of magnification (x8), you're presented with an on-screen grid option — it's well worth sticking with it if you don't want to get lost when you're getting down to detail.



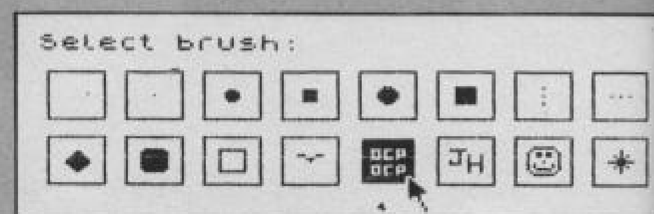
The magnify feature is the best yet — it *beats* the Macintosh! Just choose the level of magnification you want and you'll be given a magnifying glass icon that you can position over the area you want to see. Natty, eh?



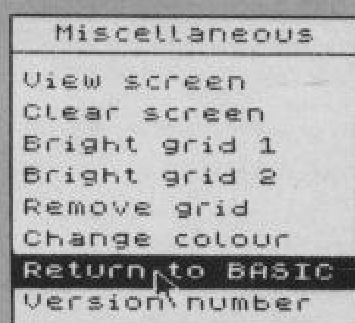
How's this for paint power? In Edit Brush mode you can define any shape you like, yes anything, and then use that to paint the drawing area. The Pen option even allows you to draw with a pen of differing thicknesses.



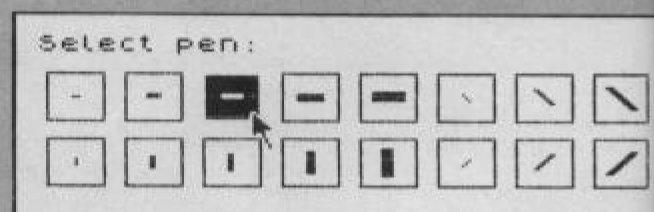
The file option will automatically give itself a header corresponding to the system you've chosen — I was using cassette but microdrive and disk options are also available. The most interesting item on the menu is for merging your screen creations with each other.



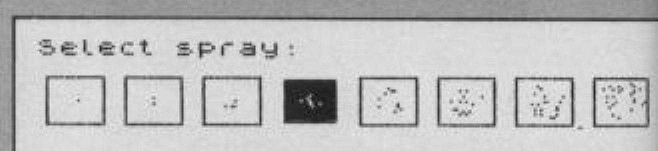
The brush is perhaps the most flexible way of covering the screen. And apart from the sixteen you see here, you can redefine any of them to your liking.



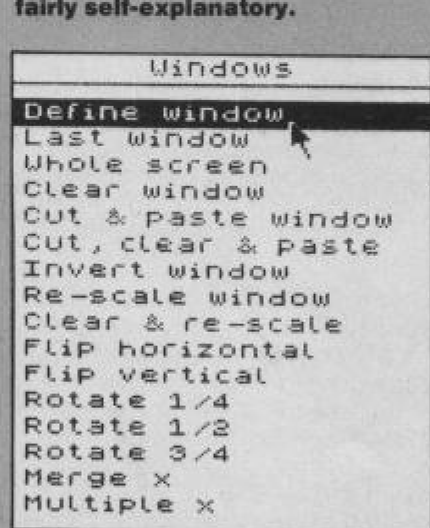
Here's a ragbag of goodies that don't sit happily anywhere else. You can see the whole screen using View Screen, for instance, and the Bright Grids will superimpose a grid so you can set the colour just right. You'll find the rest of the menu options are fairly self-explanatory.



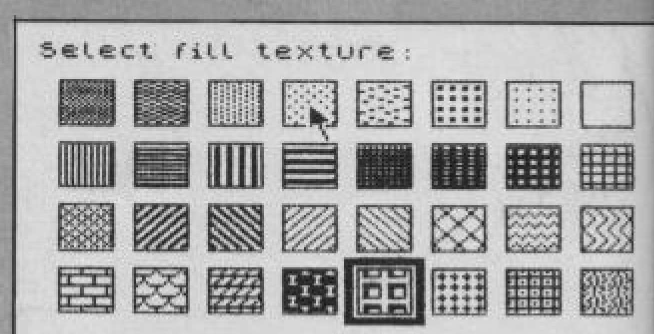
Here's the menu that greets you when you're in pen mode. The sixteen preset nibs produce some very interesting patterns and they're just great for writing italics.



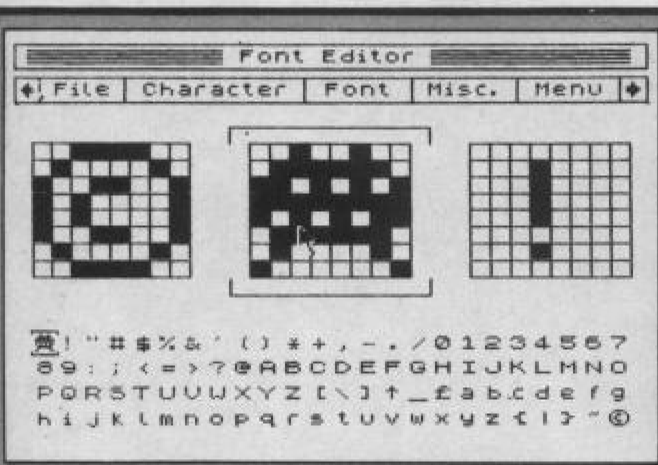
Now, the spray can selection may seem limited, what with only eight choices compared to the other menus, but remember they act as a random spray. So, each of these choices only acts as a guide to how large an area the spray will cover.



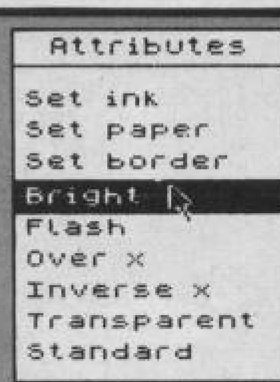
Look at the window that makes this package different. Yes, windows allow you to cut and paste your piccy until you're completely happy with it. *Art Studio* also allows you to rotate, flip and invert your windows. Well, flip me!



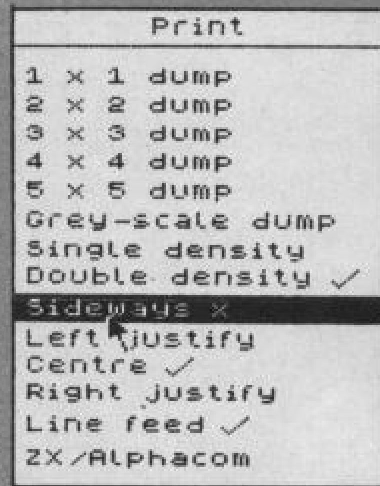
This is the choice of present designs that you're presented with in Textured Fill mode. There are thirty six of them in all but remember you can always define your own.



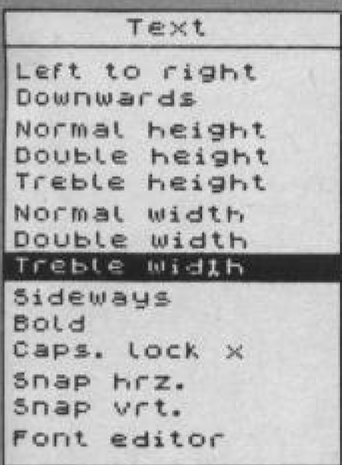
The Font Editor is a package in its own right. It's extremely easy to use — well, I've yet to find one to match it.



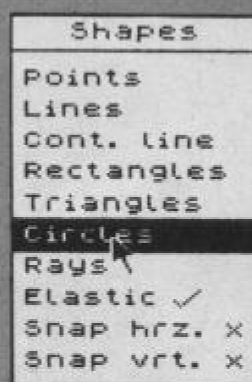
***Art Studio*'s attribute handling's very good though you may find it a touch confusing at first. Say you want to paint an area in red — you'll need to choose Set ink from this menu, then the red palette from the menu behind this, next into the brush menu where you can choose an empty brush to paint with. Not strictly Mac structure but it knocks spots off other Spectrum graphics packages.**



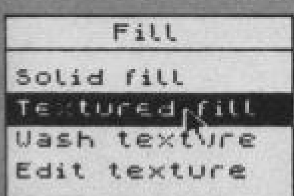
Just take a look at the mega-print features on offer with *Art Studio* — grey-scale dumps and sizes never seen before on the Speccy. The printer option wasn't implemented on the version we saw so I can't judge how good it is — sounds promising though . . .



The Text option isn't quite as clear cut as you'd think. You don't have to stick to boring ol' left to right script — how about trying the Chinese way of up'n'down. You can also have a whirl on anything up to treble height and width and even redefine the character set. The definition isn't too hot once you're into really big characters — but there I go wanting miracles again!



You'll find you keep coming back to the Shapes option. It hands you the power to draw lines, circles, triangles and rectangles. The Elastic option draws lines using the rubber band method to allow easy position. Snap horizontal and vertical puts your lines within the limits of the nearest character cell. That way it gets round any attribute problems when you come to colouring.



The Fill option is very powerful. The textured fill lets you choose from a wide range of pre-set choices but if you prefer you can always define your own with the Edit Texture feature. Now Wash Texture is very clever. With it you can texture the last thing you drew — text, single lines or circles it doesn't matter what.

To achieve that 'jumping-out-of-the-picture-at-you' feel, I drew this box with solid-fill lines and the basic textured fill.

I drew this hatch shading by roping off the area with lines and then texture filling it. I then tidied up the edges with the x4 magnification.

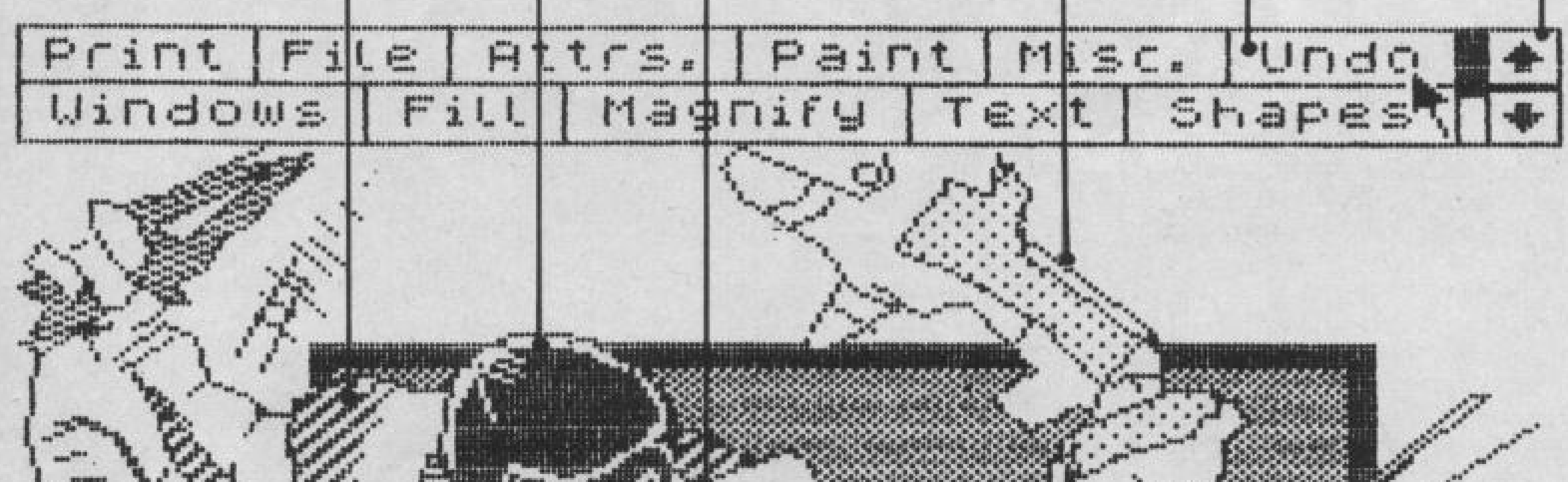
I used the brush to paint in the helmet and then used the inverse lines to create the shine on the top. Not bad, eh?

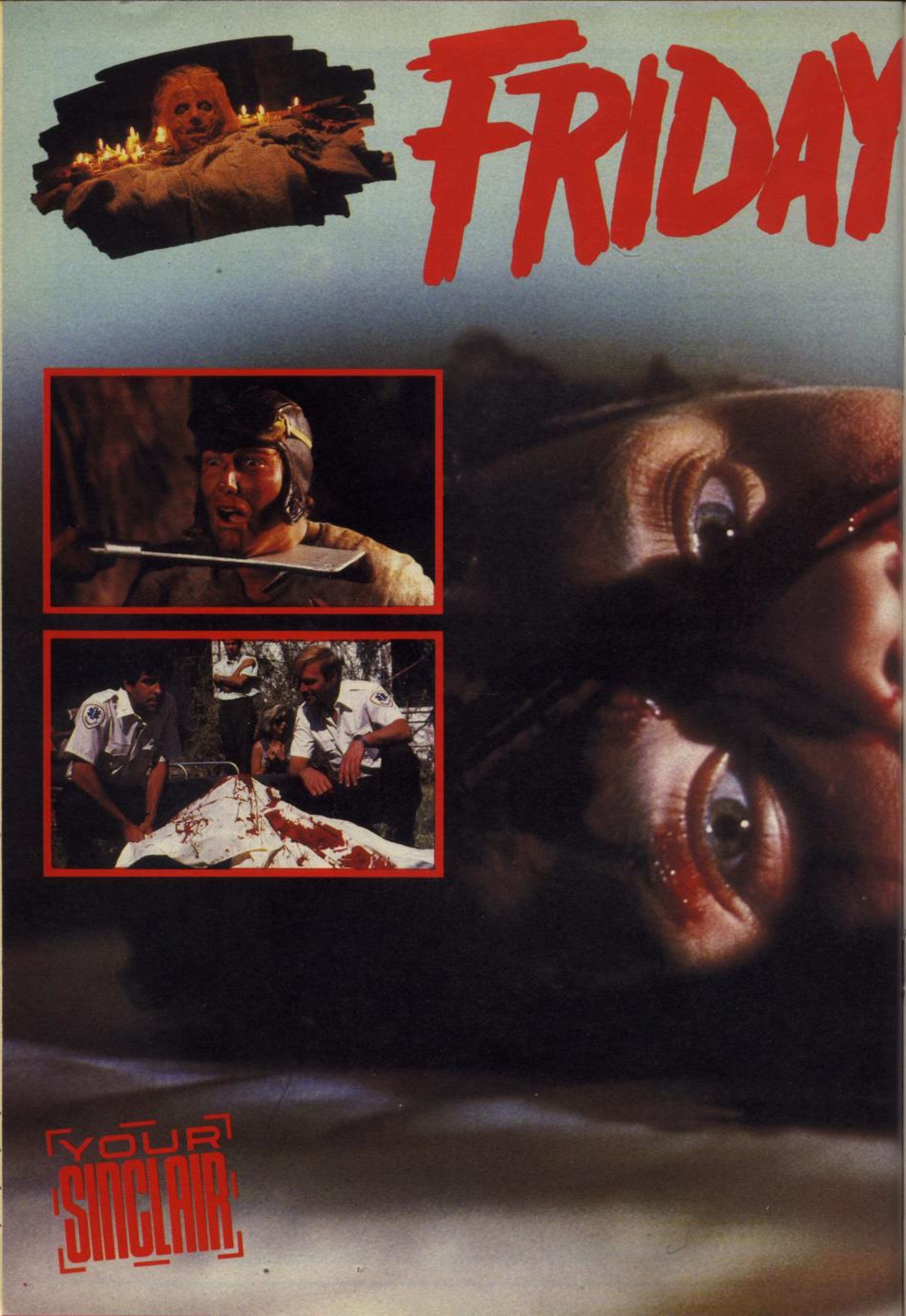
This just cried out for x8 magnification — it's one of the most important focal points of the piccy and had to be spot on.

Most of the basic lines were created with the continuous line option.

Now this is probably the most important option of them all — undo. It erases the last operation so that all those little (!) boobs can be put right.

With these arrows you can move the picture up and down to view what lies beneath the main menu.




FRIDAY
YOUR
SINCLAIR

PROGRAM POWER



8 PAGE PULL-OUT

OPPORTUNITY KNOCKS!

That's all folks! Opportunity is now on its last knockings. Yep, this is the last chance for your code to be up there with the best six Speccy programs under 5K. So, can *Hot Shot* shoot to the top of the programmer's poll? Or will it be one of the five previous programs that you'll find in back issues of *YS*? It's all down to you as you'll be the ones doing the voting. Next month, you'll find a run down of all the programs and a chance to buy them all on one Digi'T'ape. Then you'll be asked to cast your vote. Bit more sophisticated than the old clapometer, eh what?

HOT SHOT

By M Wallis

How can a game with so few bytes (just 3854) have so many features? Ask M Wallis. His Centipede-style game has eight directional movements — it's leggier than your average octopus — Kempston compatibility, optional extra lives, hold/restart and automatic fire. In all it scores more points than Torville and Dean!

Oh, by the way, don't think you've slipped up if your Speccy appears to crash after the main selection screen — just take another look at that copyright message. Once you've got that sussed, you'll just need to know that the control keys are Q for up, Z for down, I for left and P for — well, you can work that one out yourselves.

To get the game in, enter the Basic loader and save it, followed by the machine code.

The Basic Loader

Basically, this is the Loader. It's just there to load in the code.

```
   0>REM ^^^^^^^^^^^^^^^^^^^^^^^^^^^^
   1 REM ^     HOT-SHOT            ^
   2 REM ^       BY M.WALLIS       ^
   3 REM ^         1985            ^
   4 REM ^^^^^^^^^^^^^^^^^^^^^^^^^^^^
   1 CLEAR 27999: BORDER 1: PAPE
R 1: INK 5: CLS : PLOT 10,158: D
RAW 138,0: DRAW 0,-20: DRAW -138
,0: DRAW 0,20
   2 PRINT AT 3,2;"H O T - S H O
 T"
   3 PRINT AT 9,9;"I S  S T I L
L"
   4 PRINT AT 15,15;"L O A D I N
 G"
```

The Hex Loader

Hexperts will already have one of these on tape but for the rest of you, enter it and use it to type in the code.

```
  20 PLOT 66 ,110: DRAW 122,0: D
RAW 0,-20: DRAW -122,0: DRAW 0,2
0
  21 PLOT 110 ,60: DRAW 118,0: D
RAW 0,-20: DRAW -118,0: DRAW 0,2
0
  30 PRINT INK 1;AT 0,0;
  40 LOAD ""CODE
  50 LET t=USR 28000
 100 SAVE "HOT-SHOT" LINE 1
```

The Hex Data

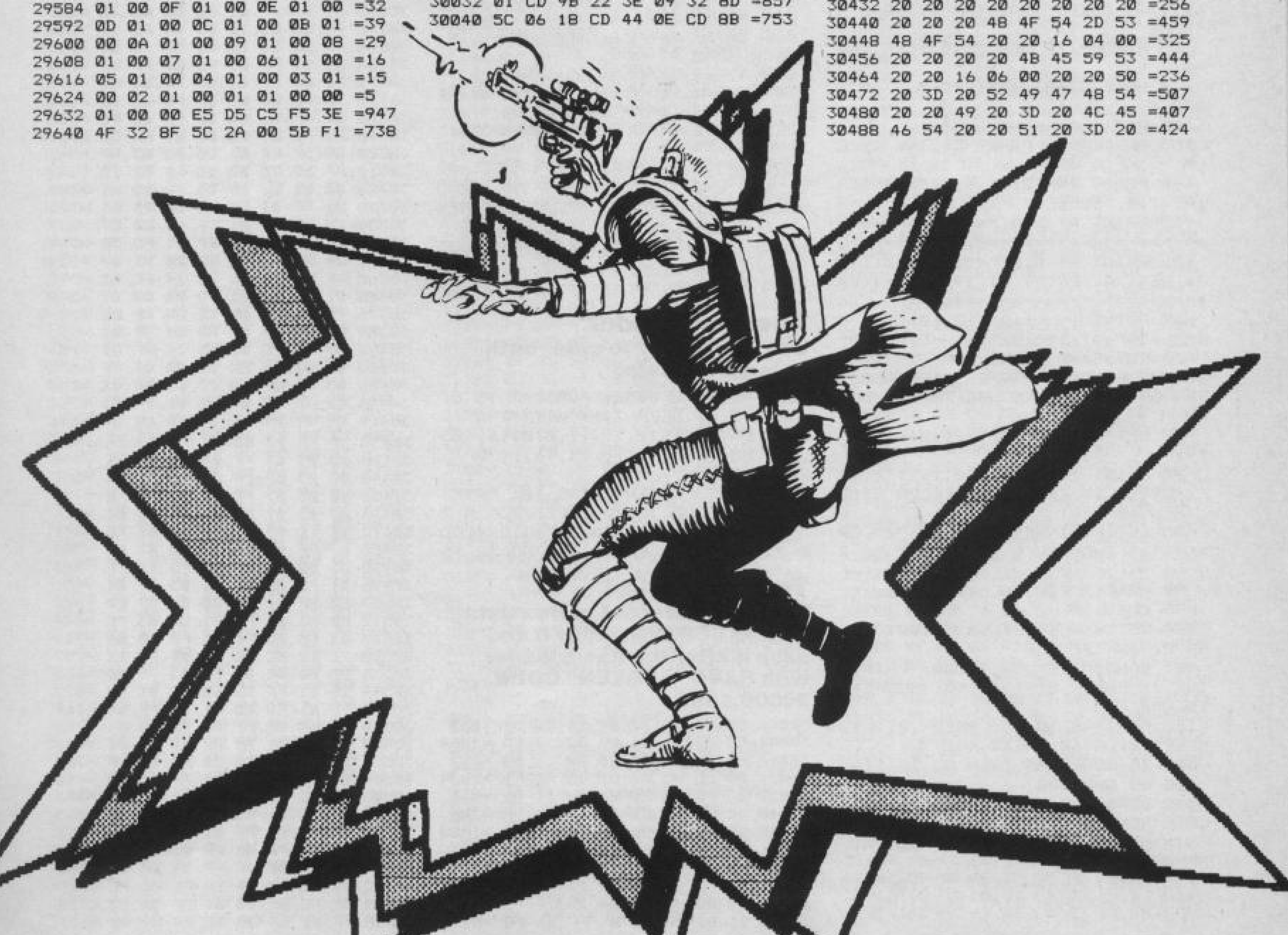
Enter the code into the Hex loader eight bytes at a time. The start address is 28000 and the length 3854. Okay?

```
28000 21 5C 78 25 22 36 5C 3E =524
28008 00 3E 00 32 01 5B CD 4A =483
28016 75 3E 1F DB 1F FE 00 20 =746
28024 41 3E 1F 32 80 74 32 A0 =662
28032 74 32 BE 74 32 DE 74 32 =910
28040 7E 74 32 9E 74 32 BC 74 =920
28048 32 DC 74 21 00 00 22 83 =584
28056 74 22 A3 74 22 C1 74 22 =806
```

```
28064 E1 74 21 CB 5F 22 81 74 =951
28072 21 CB 57 22 A1 74 21 CB =870
28080 47 22 BF 74 21 CB 4F 22 =761
28088 DF 74 3E C9 32 83 75 3E =962
28096 02 CD 01 16 3E 00 CD 9B =652
28104 22 3E 00 32 8D 5C 06 18 =409
28112 CD 44 0E 21 5D 7B 22 7B =693
28120 5C 01 3C 00 21 85 73 11 =451
28128 49 73 ED B0 3E 0A 32 02 =725
28136 5B 3E 16 32 03 5B 21 00 =352
28144 00 22 00 5B 3E 07 32 0E =258
28152 5B 3E 04 32 0D 5B CD 6F =627
28160 6E 3E 00 CD C3 73 CD 03 =895
28168 71 3A 0D 5B 47 C5 CD 42 =814
28176 71 CD FF 73 CD 1C 70 CD =1238
28184 84 6F CD D2 6E CD 42 71 =1152
28192 3A 0D 5B C1 B8 28 0C FE =845
28200 00 CA B0 7B 3E 00 CD 03 =771
28208 73 18 19 11 05 00 21 D0 =427
28216 07 CD B5 03 11 05 00 21 =451
28224 CB 00 CD B5 03 CD CA 72 =1110
28232 FE 01 20 BD 01 3C 00 21 =570
28240 85 73 11 49 73 ED B0 3A =924
28248 0E 5B 3C FE 14 28 03 32 =532
28256 0E 5B 3A 0D 5B 3C 32 0D =390
28264 5B 18 93 0D 5B 18 94 E5 =767
28272 C5 D5 F5 CD 6B 0D CD CD =1390
28280 1F CD 7F 72 3E 00 32 6B =696
28288 5C 3E 4F 32 8F 5C 21 A0 =711
28296 6E 7E FE FF 28 04 D7 23 =1039
28304 18 F7 97 32 8F 5C 3E 02 =771
28312 32 6B 5C F1 D1 C1 E1 C9 =1318
28320 16 16 00 53 43 4F 52 45 =424
28328 06 4C 49 56 45 53 06 7F =526
28336 20 20 31 20 39 20 38 20 =322
28344 35 20 20 42 20 59 20 20 =368
28352 4D 20 2E 20 57 20 41 20 =403
28360 4C 20 4C 20 49 20 53 FF =659
28368 00 00 E5 C5 D5 F5 21 07 =924
28376 5B 7E 23 5E 23 56 4F FE =800
28384 00 20 36 3A 78 5C E6 A8 =754
28392 FE 00 28 05 F1 D1 C1 E1 =1167
28400 C9 36 1E 2B 3A 78 5C E6 =828
28408 03 C6 12 77 2B 36 FF ED =927
28416 5B 08 5B 4E D5 CD 2A 75 =845
28424 FE 06 CC 03 71 14 CD 2A =847
28432 75 15 FE 06 CC 03 71 D1 =927
28440 00 3E 10 D7 97 D7 3E 16 =743
28448 D7 7B D7 7A D7 3E 20 D7 =1199
28456 3E 20 D7 15 7B 81 5F FE =931
28464 15 20 02 0E FF FE 11 20 =627
28472 02 0E 01 D5 C5 CD 2A 75 =791
28480 FE 06 CC 03 71 14 CD 2A =847
28488 75 15 FE 06 CC 03 71 C1 =911
28496 D1 7A FE FF 20 0A 3E 00 =944
28504 32 07 5B F1 D1 C1 E1 C9 =1217
```

```
28512 ED 53 08 5B 79 32 07 5B =688
28520 3E 10 D7 3E 05 D7 3E 16 =659
28528 D7 7B D7 7A D7 3E 97 D7 =1318
28536 3E 98 D7 F1 D1 C1 E1 C9 =1498
28544 D1 C1 E1 C9 E5 C5 D5 F5 =1712
28552 3A 0A 5B FE 00 20 24 3A =539
28560 78 5C FE FD 28 05 F1 D1 =1214
28568 C1 E1 C9 21 0A 5B 77 3A =930
28576 79 5C 47 3A 78 5C C6 AD =925
28584 10 FC E6 0F 3C 3C 23 77 =787
28592 23 36 00 ED 5B 0B 5B 3E =581
28600 10 D7 3E 00 D7 3E 16 D7 =807
28608 7B D7 7A D7 3E 20 D7 3E =1046
28616 20 D7 14 14 CD 2A 75 FE =905
28624 00 20 28 15 3E 1D BA 30 =418
28632 09 97 32 0A 5B F1 D1 C1 =954
28640 E1 C9 7A 32 0C 5B 3E 10 =779
28648 D7 3E 05 D7 3E 16 D7 7B =919
28656 D7 7A D7 3E 95 D7 3E 96 =1190
28664 D7 18 E2 FE 03 20 06 ED =997
28672 5B 0B 5B 18 CF 3E 10 D7 =717
28680 3E 04 D7 3E 16 D7 7B D7 =918
28688 7A D7 3E 91 D7 14 18 EB =1038
28696 D1 C1 E1 C9 F5 E5 D5 C5 =1712
28704 3A 0E 5B 47 3E 01 CD 35 =555
28712 70 3C B8 20 F9 C1 D1 E1 =1264
28720 F1 C9 00 00 00 E5 D5 C5 =1081
28728 F5 21 46 73 11 03 00 47 =554
28736 19 10 FD 22 36 5B 5E 23 =602
28744 56 23 4E 3E 02 B9 20 05 =485
28752 F1 C1 D1 E1 C9 3E 10 D7 =1362
28760 97 D7 3E 16 D7 7B D7 7A =1125
28768 D7 3E 20 D7 3E 03 B9 20 =806
28776 04 1C C3 BD 70 D5 7A 81 =992
28784 57 CD 2A 75 D1 FE 00 20 =946
28792 0E 79 82 FE 20 28 08 FE =853
28800 FF 28 04 57 C3 BD 70 7A =1004
28808 81 FE 20 28 04 FE FF 20 =1000
28816 08 79 ED 44 4F 1C C3 BD =925
28824 70 D5 79 82 57 CD 2A 75 =1027
28832 D1 FE 04 20 06 0E 03 1C =550
28840 C3 BD 70 FE 06 20 06 79 =915
28848 82 57 C3 BD 70 79 ED 44 =1139
28856 4F 1C C3 C6 70 CD 2A 75 =976
28864 FE 04 20 02 0E 03 3E 16 =393
28872 BB 20 06 1E 11 16 1F 0E =339
28880 FF 3E 15 BB 20 07 3E 03 =629
28888 B9 20 02 0E 01 CD 2A 75 =598
28896 FE 06 CC 03 71 2A 36 5B =767
28904 73 23 72 23 71 3E 10 D7 =705
28912 3E 03 D7 3E 16 D7 7B D7 =917
28920 7A D7 3E 90 D7 F1 C1 D1 =1401
28928 E1 C9 00 E5 D5 C5 F5 3A =1368
28936 0D 5B 3D 32 0D 5B 47 3E =452
28944 01 32 6B 5C 3E 16 D7 3E =611
28952 16 D7 3E 16 D7 3E 4F 32 =727
28960 8F 5C 3E 00 B8 28 06 3E =589
28968 94 D7 05 18 F5 3E 20 D7 =946
28976 3E 02 32 6B 5C 3E 00 32 =425
28984 8F 5C CD ED 72 F1 C1 D1 =1434
28992 E1 C9 E5 C5 D5 F5 CD 56 =1601
29000 71 ED 5B 02 5B CD FA 74 =1105
29008 F1 D1 C1 E1 C9 00 E5 D5 =1511
29016 C5 F5 3A 04 5B FE 00 20 =881
29024 03 C3 64 71 3A 04 5B FE =818
29032 00 20 11 3E 01 21 04 5B =240
29040 77 23 ED 5B 02 5B 73 23 =725
29048 72 2B 00 00 3E 10 D7 3E =512
29056 00 D7 3E 16 D7 2A 05 5B =652
29064 7D D7 7C D7 3E 20 D7 2D =1033
29072 5D 54 CD 2A 75 FE 00 20 =827
29080 32 22 05 5B 3E 10 D7 3E =535
29088 07 D7 3E 16 D7 7D D7 7C =985
29096 D7 3E 93 D7 3E 00 BD 20 =922
29104 15 3E 10 D7 3E 00 D7 3E =653
29112 16 D7 7D D7 7C D7 3E 20 =1010
29120 D7 3E 00 32 04 5B F1 C1 =856
29128 D1 E1 C9 F5 3E 01 CD 03 =1151
29136 73 97 32 04 5B 2A 05 5B =549
29144 2D F1 FE 04 28 04 FE 02 =844
29152 20 19 3E 10 D7 97 D7 3E =778
29160 16 D7 7D D7 7C D7 3E 20 =1010
29168 D7 3E 01 CD C3 73 F1 C1 =1227
29176 D1 E1 C9 FE 05 20 22 2A =1002
29184 0B 5B 3E 10 D7 97 32 0A =606
29192 5B D7 3E 16 D7 7D D7 7C =1069
```

```
29200 D7 3E 20 D7 3E 20 D7 3E =895
29208 0A CD C3 73 F1 C1 D1 E1 =1393
29216 C9 FE 01 20 0D 2A 08 5B =642
29224 3E 10 D7 3E 00 32 07 5B =503
29232 18 D7 21 49 73 06 14 7E =612
29240 23 BB 20 04 7E BA 28 09 =619
29248 23 23 10 F3 F1 C1 D1 E1 =1197
29256 C9 23 7E FE 02 28 F2 36 =954
29264 02 3E 05 CD C3 73 3E 10 =662
29272 D7 3E 02 D7 3E 16 D7 7B =916
29280 D7 7A D7 3E 91 D7 18 DC =1218
29288 3E 05 CD C3 73 3E 10 D7 =875
29296 3E 02 D7 3E 16 D7 7B D7 =916
29304 7A D7 3E 91 D7 18 E. E5 =1237
29312 D5 C5 F5 2A 78 5C 7D E6 =1264
29320 1F 57 7C E6 0F 5F 06 00 =588
29328 3E 10 D7 3E 02 D7 3E 16 =656
29336 D7 7B D7 7A D7 3E 91 D7 =1312
29344 7B C6 07 5F 7A C6 03 57 =833
29352 83 57 7B 82 5F 3E 1F BA =845
29360 30 06 7A D6 20 57 18 F5 =778
29368 3E 12 BB 30 06 7B D6 11 =675
29376 5F 18 F5 10 CB F1 C1 D1 =1226
29384 E1 C9 E5 D5 C5 00 21 4B =1173
29392 73 3A 0E 5B 3D 47 7E FE =790
29400 02 20 0C 23 23 23 10 F6 =413
29408 3E 01 00 C1 D1 E1 C9 97 =1042
29416 18 FB 00 00 00 2A 02 5B =407
29424 3E 10 D7 3E 00 D7 3E 16 =654
29432 D7 7D D7 7C D7 3E 20 D7 =1203
29440 C9 00 00 E5 D5 C5 F5 FE =1339
29448 01 20 16 21 01 00 06 32 =145
29456 11 01 00 E5 C5 CD B5 03 =833
29464 C1 E1 23 23 23 10 F0 18 =803
29472 21 21 00 00 06 14 C5 06 =295
29480 00 C5 7E 06 07 C5 01 FE =788
29488 00 F5 EE 10 ED 79 F1 17 =1121
29496 C1 10 F2 23 C1 10 EA C1 =1122
29504 10 E4 F1 C1 D1 E1 C9 00 =1313
29512 00 24 2B FF 11 19 FF 01 =632
29520 14 02 12 1E 01 11 1C FF =371
29528 11 1D FF 11 1E FF 11 1F =651
29536 FF 15 1F 01 00 0A 01 00 =319
29544 09 01 00 08 01 00 07 01 =27
29552 00 06 01 00 05 01 00 04 =17
29560 01 00 03 01 00 02 01 00 =8
29568 01 01 00 00 01 00 13 01 =23
29576 00 12 01 00 11 01 00 10 =53
29584 01 00 0F 01 00 0E 01 00 =32
29592 0D 01 00 0C 01 00 0B 01 =39
29600 00 0A 01 00 09 01 00 08 =29
29608 01 00 07 01 00 06 01 00 =16
29616 05 01 00 04 01 00 03 01 =15
29624 00 02 01 00 01 01 00 00 =5
29632 01 00 00 E5 D5 C5 F5 3E =947
29640 4F 32 8F 5C 2A 00 5B F1 =738
29648 F5 16 00 5F 19 44 4D 22 =566
29656 00 5B 3E 01 32 6B 5C 3E =465
29664 16 D7 3E 16 D7 3E 07 D7 =820
29672 44 4D CD 1B 1A 3E 30 D7 =728
29680 3E 02 32 6B 5C 3E 00 32 =425
29688 8F 5C F1 C1 D1 E1 C9 E5 =1533
29696 C5 D5 F5 01 FE BF ED 78 =1458
29704 E6 10 FE 10 28 6B 21 00 =696
29712 5A 11 6D 7C 01 E0 00 ED =802
29720 B0 21 00 5A 36 00 11 01 =371
29728 5A 01 DF 00 ED B0 3A 00 =785
29736 5B 32 15 78 3A 01 5B 32 =482
29744 16 78 3E 00 32 00 5B CD =550
29752 34 78 CD 02 76 3E FD DB =1031
29760 FE E6 02 FE 02 28 02 18 =808
29768 19 3E 7F DB FE E6 04 FE =1175
29776 04 28 E7 3E FB DB FE E6 =1291
29784 02 FE 02 28 DD CD A6 7B =1013
29792 18 DB 21 6D 7C 11 00 5A =613
29800 01 E0 00 ED B0 3A 15 78 =837
29808 32 00 5B 3A 16 78 32 01 =392
29816 5B ED 5B 02 5B 3E FB DB =1044
29824 FE E6 01 FE 01 28 12 1D =827
29832 7B FE 02 28 0C CD 2A 75 =795
29840 FE 00 20 05 CD FA 74 18 =886
29848 1E ED 5B 02 5B 3E FE DB =986
29856 FE E6 02 FE 02 28 10 1C =826
29864 7B FE 17 28 0A CD 2A 75 =814
29872 FE 00 20 03 CD FA 74 ED =1097
29880 5B 02 5B 3E DF DB FE E6 =1172
29888 01 FE 01 28 12 14 7A FE =710
29896 20 28 0C CD 2A 75 FE 00 =702
29904 20 05 CD FA 74 18 1E ED =899
29912 5B 02 5B 3E DF DB FE E6 =1172
29920 04 FE 04 28 10 15 7A FE =715
29928 FF 28 0A CD 2A 75 FE 00 =923
29936 20 03 CD FA 74 F1 D1 C1 =1249
29944 E1 C9 E5 D5 C5 F5 3E 16 =1394
29952 D7 2A 02 5B 7D D7 7C D7 =1029
29960 3E 10 D7 3E 00 D7 3E 20 =664
29968 D7 ED 53 02 5B 3E 10 D7 =921
29976 3E 06 D7 3E 16 D7 7B D7 =920
29984 7A D7 3E 94 D7 F1 C1 D1 =1405
29992 E1 C9 E5 D5 C5 97 21 00 =1249
30000 5B BB 28 09 D5 43 11 20 =653
30008 00 19 10 FD D1 5A 16 00 =615
30016 19 7E C1 D1 E1 C9 00 3B =1038
30024 00 00 3E 02 CD 01 16 3E =354
30032 01 CD 9B 22 3E 09 32 8D =657
30040 5C 06 18 CD 44 0E CD 8B =753
30048 76 CD 5E 76 CD A6 75 CD =1228
30056 02 76 AF DB FE E6 1F FE =1283
30064 1F 28 F1 3E 0F 32 6A 76 =663
30072 CD D3 76 CD 5E 76 06 64 =1057
30080 76 10 FD 00 3E 07 CD 9B =816
30088 22 3E 00 32 8D 5C 06 18 =409
30096 CD 44 0E 06 46 76 10 FD =750
30104 3E 38 32 8D 5C 06 18 CD =636
30112 44 0E CD ED 77 C9 06 04 =854
30120 76 10 FD 3A 00 5B 47 CD =812
30128 F6 75 78 32 00 5B 21 00 =657
30136 58 0E 20 70 23 CD F6 75 =849
30144 0D C2 BB 75 0E 0D 2B 11 =598
30152 20 00 19 70 CD F6 75 0D =750
30160 C2 CA 75 19 0E 20 70 2B =739
30168 CD F6 75 0D C2 D6 75 37 =1161
30176 3F ED 52 0E 0D 23 70 11 =573
30184 20 00 37 3F ED 52 CD F6 =920
30192 75 0D C2 E6 75 C9 78 C6 =1190
30200 02 FE 40 C2 00 76 3E 10 =710
30208 47 C9 06 04 76 10 FD 3A =727
30216 00 5B 47 CD 52 76 78 32 =737
30224 00 5B 21 00 5A 0E 20 70 =372
30232 23 CD 52 76 0D C2 17 76 =788
30240 0E 05 2B 11 20 00 19 70 =248
30248 CD F6 75 0D C2 26 76 19 =956
30256 0E 20 70 2B CD 52 76 0D =619
30264 C2 32 76 37 3F ED 52 0E =813
30272 05 23 70 11 20 00 37 3F =319
30280 ED 52 CD 52 76 0D C2 42 =997
30288 76 C9 78 C6 02 FE 40 C2 =1151
30296 5C 76 3E 10 47 C9 0E 20 =606
30304 21 00 58 06 18 11 20 00 =200
30312 E5 36 12 19 10 FB C5 21 =823
30320 D0 00 11 20 00 CD B5 03 =646
30328 C1 E1 E5 06 18 11 20 00 =726
30336 36 0F 19 10 FB E1 23 0D =634
30344 20 D9 C9 3E 02 CD 01 16 =742
30352 11 DD 76 01 16 00 CD 3C =644
30360 20 11 81 74 11 F5 76 01 =675
30368 0B 00 CD 3C 20 11 02 77 =446
30376 01 20 00 CD 3C 20 11 23 =382
30384 77 01 20 00 CD 3C 20 11 =466
30392 44 77 01 20 00 CD 3C 20 =517
30400 11 65 77 01 21 00 CD 3C =536
30408 20 11 AC 77 01 20 00 CD =578
30416 3C 20 C9 11 CD 77 01 20 =667
30424 00 CD 3C 20 C9 16 02 00 =522
30432 20 20 20 20 20 20 20 20 =256
30440 20 20 20 48 4F 54 2D 53 =459
30448 48 4F 54 20 20 16 04 00 =325
30456 20 20 20 20 4B 45 59 53 =444
30464 20 20 16 06 00 20 20 50 =236
30472 20 3D 20 52 49 47 48 54 =507
30480 20 20 49 20 3D 20 4C 45 =407
30488 46 54 20 20 51 20 3D 20 =424
```



ALIEN



by Stewart Green

Eat your heart out, Buck Rogers — Stewart Green's self-styled megagame puts you up there with those other star war heroes — Flash Gordon, Luke Skywalker, Ronnie Reagan... *Alien* is an Arcadian shoot'em up, it lets you arm a photon craft and exterminate squillions of aliens — and between remorseless waves you can slope off to capture a fuel pod to replenish your power packs. And then you're hot in pursuit of pulse after pulse of alien attackers. Go on, shoot 'em up!

The machine code is in two parts so entry is a bit out of the ordinary — follow the instructions carefully.

The Basic Loader

Type this in and save it with SAVE "ALIEN" LINE 10

```
   1 GO TO 100
  10 BORDER 0: PAPER 0: INK 0: C
LEAR 29999:
  12 PRINT INK 9; FLASH 1;AT 10,
10;"LOADING:"; INVERSE 1;"ALIENS
": LOAD ""CODE : RANDOMIZE USR 3
0000
  15 DIM A$(32): INK 7: FOR A=0
TO 7: PRINT AT A,0; OVER 1;A$: N
EXT A: PRINT BRIGHT 1;AT 12,10;"
by S.GREEN";AT 14,6;"for YOUR SP
ECTRUM";AT 16,10; 1.10.85"
  20 FOR A=0 TO 10: BEEP .01,A:
NEXT A: BEEP .1,A: INK 0: LOAD "
"CODE
  35 RANDOMIZE USR 35193: LET hs
=0
  40 POKE 23606,145: POKE 23607,
250
  50 REM define keys
  55 BORDER 5: PAPER 5: INK 3: C
LS
  60 PRINT INK 2;AT 6,4;"PLEASE"
;AT 7,4;"SELECT"
  65 PRINT AT 2,0;"==============
==================": FOR A=3 TO
 18: PRINT AT A,0;"=";AT A,31;"=
": NEXT A: PRINT AT 19,0;"======
=========================="
  67 PRINT INK 1;AT 10,10;"1 - S
INCLAIR";AT 12,10;"2 - KEYBOARD"
  70 LET S$=" PRESS KEY '1' TO U
SE THE SINCLAIR TYPE INTERFACE -
--- OR KEY '2' TO USE THE KEYBOA
RD "
  75 LET A=0: LET S$=S$+S$: LET
X=1
  80 PRINT INK 2;AT 18,1;S$(X TO
 X+29): LET X=X+1: IF X=LEN S$/2
 THEN LET X=1
  85 LET K$=INKEY$: IF K$>"2" OR
 K$<"1" THEN BEEP .03,0: GO TO 7
9
  90 POKE 23728,VAL K$
  99 CLS
 100 LET score=10*USR 32100: PAP
ER 0: INK 7: CLS
 102 RANDOMIZE USR 30000: PRINT
INK 7; PAPER 0;AT 10,10;"SCORE="
;SCORE
 105 FOR A=0 TO 20: BEEP .01,A:
BEEP .01,A+10: NEXT A
 109 IF SCORE<HS THEN GO TO 116
 110 GO SUB 200
 115 BORDER 0: PAPER 0: INK 7: C
LS : RANDOMIZE USR 30000
 116 FOR A=0 TO 20: BEEP .01,A:
BEEP .01,A+10: NEXT A
 120 PRINT FLASH 1;AT 12,10;"HIG
H SCORE"; FLASH 1;AT 14,13;HS
 130 LET I=0
 131 INPUT "": PRINT #1;"   PRES
S 'K' TO CHANGE KEYS": POKE 2365
8,8
 140 IF INKEY$="N" THEN INK 0: P
APER 1: FLASH 1: CLS : PAPER 7:
FLASH 0: PRINT AT 10,11;"CHICKEN
": FOR A=50 TO 0 STEP -1: PRINT
AT 12,13;A: BEEP .01,A: NEXT A:
PRINT USR 0
 141 PRINT INK I;AT 20,2;"DO YOU
 WANT ANOTHER GO Y/N": LET I=I+1
-(7 AND I=8)
 142 POKE 65186,29: RANDOMIZE US
R 65000
 145 IF INKEY$="K" THEN GO TO 40
 150 IF INKEY$<>"Y" THEN : GO TO
 132
 160 GO TO 100
 195 PRINT INK 7; PAPER 0;AT 10,
10;"SCORE=";SCORE
 200 INK 6: PAPER 1: BORDER 1
 201 CLS : PRINT INK 7; PAPER 0;
AT 10,10;"SCORE=";SCORE
 210 FOR L=0 TO 2: GO SUB 8000:
NEXT L
 220 LET hs=score: CLS : LET n=2
0: FOR L=0 TO 20: PRINT INK (RND
*8); PAPER 8;AT 21,RND*14;"A NEW
 HIGH SCORE.": BEEP .01,n: LET n
=n+5-(20 AND n=45): LET A=USR 35
82: NEXT 1
 230 RETURN
```

The Hex Loader

Use this loader to enter both sets of Hex data.

```
8000 RESTORE 8050: FOR I=1 TO 8:
 READ T,N: BEEP T,N: NEXT I
8050 DATA .1,11,.1,11,0.8,16,.05
,11,.05,16,.05,11,.05,16,1,20
8060 RETURN
9999 SAVE "ALIEN" LINE 10: SAVE
"SCREEN"CODE 30000,1899: FOR A=0
 TO 100: NEXT A: SAVE "ALIEN"COD
E 32100,3990: BEEP 1,0: GO TO 35
```

The Hex Data I

This is the first set of Hex data, named SCREEN. Enter it and save it after the Basic loader with SAVE "SCREEN" CODE 30000,1899.

```
30000 CD 56 75 3E 40 21 00 58 =655
30008 E5 D1 13 01 FF 00 77 ED =1069
30016 B0 F5 06 0A C5 60 11 0A =757
30024 00 CD B5 03 C1 10 F5 F1 =1084
30032 3C FE 48 20 E0 C9 11 00 =860
30040 40 DD 21 54 00 DD 09 7A =754
30048 FE 48 C8 DD 7E 00 A7 28 =1080
30056 0A FE FF 28 06 12 13 DD =823
30064 23 18 EC DD 46 01 12 13 =624
30072 10 FC DD 23 DD 23 18 DF =1027
30080 00 00 00 00 00 23 7F FF =417
30088 01 80 00 01 01 FF 01 F0 =627
30096 00 01 03 FF 01 FC 00 02 =514
30104 FF 03 F8 00 01 01 FF 01 =764
30112 80 03 FC 00 01 01 FF 01 =641
30120 F0 00 04 03 FF 02 F8 00 =752
30128 01 07 FF 01 FC 00 02 1F =549
30136 FE 00 01 03 FF 01 FC 00 =766
30144 03 07 FF 01 F0 0F FE 07 =782
30152 FF 02 FC 00 04 07 F8 03 =771
30160 FF 01 00 01 1F FE 00 03 =545
30168 1F FF 01 00 01 07 FE 00 =549
30176 04 0F FF 03 FE 0F F8 00 =794
30184 06 FF 02 81 FF 01 C0 1F =871
30192 FE 00 03 0F FF 01 00 01 =529
30200 03 FF 02 F8 00 02 3F FF =828
30208 03 80 07 FF 02 E0 00 03 =622
30216 07 FF 04 F0 1F FE 00 03 =794
30224 07 FF 01 80 03 FF 01 00 =650
30232 03 01 FF 01 FC 07 FE 00 =773
30240 02 07 FF 01 F8 00 03 1F =547
30248 FE 00 01 1F FF 01 F8 0F =805
30256 FF 01 C0 00 02 07 FF 01 =713
30264 80 03 FF 03 F0 07 FF 01 =892
30272 F0 03 FF 01 07 FF 01 80 =890
30280 7F FE 00 03 0F F0 00 01 =640
30288 01 FF 01 C0 03 FF 03 F8 =958
30296 07 FF 01 F0 00 01 FF 03 =762
30304 80 1F FF 01 80 00 03 0F =561
30312 FF 02 FC 00 25 FF 02 E0 =1027
30320 00 01 03 FF 01 F8 00 01 =509
30328 07 FF 01 FC 00 02 FF 03 =775
30336 F8 00 01 01 FF 01 E0 07 =737
30344 FC 00 01 07 FF 01 F8 00 =764
30352 04 03 FF 02 FC 00 01 07 =524
30360 FF 01 FC 00 02 1F FE 00 =795
30368 01 03 FF 01 F8 00 03 07 =518
30376 FF 01 F0 0F FE 07 FF 02 =1029
30384 FC 00 04 07 F8 03 FF 01 =770
30392 80 1F FC 00 03 1F FF 01 =701
30400 00 01 07 FE 00 04 0F FF =536
30408 03 FE 0F F8 00 06 FF 04 =785
30416 C0 1F FE 00 03 0F FF 01 =751
30424 00 01 03 FF 02 F8 00 02 =511
30432 3F FF 03 80 07 FF 02 E0 =937
30440 00 03 07 FF 04 F0 1F FE =794
30448 00 03 07 FF 01 80 03 FE =651
30456 00 03 03 FF 01 FC 07 FE =775
30464 00 02 07 FF 01 F8 00 03 =516
30472 1F FE 00 01 1F FF 01 F8 =821
30480 0F FF 01 E0 01 E0 07 FF =982
30488 01 80 03 FF 03 F8 07 FF =900
30496 01 F0 03 FF 01 03 FF 01 =759
30504 E0 FF 01 FE 00 03 0F E0 =976
30512 00 01 01 FF 01 80 03 FF =644
30520 03 F0 03 FF 01 F0 00 01 =743
30528 FF 02 FC 00 01 1F FF 01 =797
30536 80 00 03 07 FF 02 F8 00 =643
30544 24 01 FF 02 E0 00 01 03 =522
30552 FF 01 F8 00 01 07 FF 01 =768
30560 FC 00 02 FF 03 F8 00 01 =761
30568 03 FF 01 E0 07 FC 00 01 =743
30576 0F FF 01 F8 00 04 07 FF =785
30584 02 FC 00 01 07 FF 01 F8 =766
30592 00 02 1F FE 00 01 03 FF =546
30600 01 F8 00 03 07 FF 01 F8 =763
30608 0F FE 0F FF 01 87 FC 00 =927
30616 04 07 F8 03 FF 01 80 1F =677
30624 FC 00 03 1F FF 01 00 01 =543
30632 07 FE 00 04 1F FF 03 FC =806
30640 0F FC 00 05 01 FF 04 E0 =756
30648 1F FE 00 03 0F FF 01 80 =687
```



```
30656 03 FF 02 F8 00 02 7F FF =892
30664 03 00 01 03 FF 02 F0 00 =504
30672 03 0F FF 04 F0 1F FE 00 =802
30680 03 07 FF 01 80 03 FE 00 =651
30688 03 03 FF 01 FC 07 FF 01 =777
30696 00 02 07 FF 01 FC 00 03 =520
30704 1F FE 00 01 07 FF 01 F8 =797
30712 0F FF 01 FE 03 F0 07 FF =1030
30720 01 80 03 FF 03 F8 07 FF =900
30728 01 E0 01 FF 01 03 FF 03 =743
30736 FE 00 03 0F E0 00 01 01 =498
30744 FF 01 80 00 01 7F FF 02 =769
30752 E0 03 FF 01 F0 00 01 FF =979
30760 02 F8 00 01 1F FF 01 00 =538
30768 04 01 FF 02 F8 00 24 01 =547
30776 FF 02 F0 00 01 03 FF 01 =757
30784 FC 00 01 03 FF 01 FC 00 =764
30792 02 FF 03 F8 00 01 03 FF =767
30800 01 E0 07 FC 00 01 0F FF =755
30808 01 FC 00 04 07 FF 02 FC =773
30816 00 01 07 FF 01 F8 00 02 =514
30824 1F FE 00 01 03 FF 01 C0 =737
30832 00 03 07 FF 01 F8 0F FE =783
30840 0F FF 01 03 F0 00 04 0F =533
30848 F8 01 FF 01 80 1F FC 00 =916
30856 03 1F FF 01 00 01 07 FE =552
30864 00 04 1F FF 03 F8 0F FC =808
30872 00 05 03 FF 04 E0 1F FE =776
30880 00 03 0F FF 01 80 03 FF =660
30888 02 F8 00 02 7F FF 03 FF =637
30896 01 03 FF 02 F0 00 03 0F =519
30904 FF 04 F0 1F FE 00 03 07 =794
30912 FF 01 80 03 FE 00 03 03 =647
30920 FF 01 F8 07 FF 01 00 02 =769
30928 07 FF 01 FC 00 03 1F FC =801
30936 00 01 07 FF 01 F0 0F FF =774
30944 02 0F F8 07 FF 01 80 03 =659
30952 FF 03 F8 0F FF 01 E0 00 =1001
30960 01 FE 01 FF 03 FE 00 03 =771
30968 0F C0 00 02 7F 00 02 1F =369
30976 FF 02 80 00 01 FF 01 E0 =866
30984 00 01 7F FF 01 F0 00 01 =625
30992 0F FE 00 05 7F FF 01 E0 =881
31000 00 24 01 FF 02 F0 00 01 =535
31008 03 FF 01 FC 00 01 01 FF =768
31016 01 FC 00 01 01 FF 03 E0 =737
31024 00 01 03 FF 01 E0 07 FE =745
31032 00 01 1F FF 01 FC 00 04 =544
31040 07 FF 02 FC 00 01 0F FF =787
31048 01 E0 00 02 1F FE 00 01 =513
31056 07 FF 01 80 00 03 07 FF =656
31064 01 F8 1F FE 0F FF 01 01 =806
31072 E0 00 04 0F F8 01 FF 01 =748
31080 C0 1F FC 00 03 1F FF 01 =765
31088 00 01 07 FF 01 00 04 1F =299
31096 FF 03 F8 0F FF 01 00 05 =782
31104 03 FF 04 E0 1F FE 00 03 =774
31112 0F FF 01 80 03 FF 02 E0 =883
31120 00 02 FF 04 00 01 03 FF =520
31128 02 F8 00 03 0F FF 04 F0 =767
31136 1F FE 00 03 07 FF 01 80 =679
31144 03 FF 01 E0 00 02 03 FF =743
31152 01 F8 07 FF 01 00 02 03 =517
31160 FF 01 FC 00 03 1F FC 00 =794
31168 01 07 FF 01 F0 07 FF 02 =768
31176 DF F8 07 FF 01 80 01 FF =1118
31184 03 F8 0F FF 01 E0 00 01 =747
31192 7E 00 01 FF 03 FE 00 03 =642
31200 07 C0 00 02 3E 00 02 03 =268
31208 FF 01 FE 00 02 3F 80 00 =703
31216 01 3F FC 00 02 07 C0 00 =517
31224 05 3F FF 01 00 0F 07 E0 =570
31232 00 03 7F FF 01 80 00 0E =528
31240 01 FF 02 F8 00 01 03 FF =765
31248 01 FC 00 02 3F FE 00 01 =573
31256 01 FF 02 C0 00 02 03 FF =710
31264 01 E0 07 FE 00 01 7F FF =869
31272 01 FC 00 04 07 FE 07 FC =777
31280 00 01 0F FF 01 80 00 02 =402
31288 1F FE 00 01 07 FF 01 80 =677
31296 00 03 0F FF 01 FC FF 01 =782
31304 FE 0F FE 01 80 00 04 0F =671
31312 F8 01 FF 01 C0 1F FC 00 =980
31320 03 1F FF 01 00 01 07 FF =553
31328 01 F8 00 03 1F FF 03 F8 =789
31336 0F FF 01 E0 00 04 03 FF =757
31344 04 E0 1F FE 00 03 0F FF =786
31352 01 80 03 FF 01 FC 00 03 =643
31360 FF 04 00 02 FF 02 F8 00 =766
31368 03 0F FF 04 F0 1F FE 00 =802
31376 03 07 FF 01 80 03 FF 02 =654
31384 E0 00 01 03 FF 01 F8 07 =739
31392 FF 01 03 F0 01 FF 01 FC =1008
31400 00 03 1F F0 00 01 03 FF =533
31408 01 F0 07 FF 03 F8 07 FF =1016
31416 01 80 01 FF 03 F8 0F FF =906
31424 01 E0 00 01 3E 00 01 3F =352
31432 FF 02 FE 00 03 07 00 07 =528
31440 0F FC 00 05 07 80 00 09 =416
31448 07 FC 00 0B 03 C0 00 02 =467
31456 3F F8 00 02 0F FF 02 E0 =809
31464 00 02 38 00 02 F8 00 02 =310
31472 07 80 00 04 03 FF 02 F8 =647
31480 00 01 07 FF 01 FC 00 02 =518
31488 1F FE 00 01 01 FF 02 00 =544
31496 03 07 FF 01 F0 07 FE 00 =767
31504 01 FF 02 FC 00 04 07 F8 =769
31512 07 FE 00 01 0F FF 01 00 =533
31520 03 1F FE 00 01 07 FE 00 =550
31528 04 0F FF 03 FE 0F FC 00 =798
31536 06 1F F8 01 FF 01 C0 1F =765
31544 FE 00 03 1F FF 01 00 01 =545
31552 07 FF 02 00 03 1F FF 03 =556
31560 E0 07 FF 02 00 04 07 FF =754
31568 04 E0 1F FE 00 03 07 FF =778
31576 01 80 03 FF 01 E0 00 02 =614
31584 01 FF 02 9F FF 01 00 02 =675
31592 07 FF 01 F8 00 03 0F FF =784
31600 01 F8 3F FF 01 F8 1F FF =1102
31608 01 00 03 07 FF 01 80 03 =398
31616 FF 02 FC 00 01 03 FF 01 =769
31624 F0 07 FF 01 03 F8 00 01 =755
31632 FF 01 FC 00 03 1F F0 00 =782
31640 01 03 FF 01 C0 07 FF 03 =717
31648 F8 07 FF 01 E0 01 FF 03 =994
31656 F0 1F FF 01 E0 00 01 1C =780
31664 00 01 1F FF 02 FE 00 25 =580
31672 1B FC 00 03 3F E0 00 02 =571
31680 FF 01 F8 00 02 3F FF 02 =826
31688 F8 00 02 FF 01 00 01 01 =508
31696 F8 00 02 FF 01 F0 00 04 =750
31704 03 FF 02 F8 00 01 07 FF =771
31712 01 FC 00 02 1F FE 00 01 =541
31720 01 FF 02 00 03 07 FF 01 =524
31728 F0 07 FE 01 FF 02 FC 00 =1011
31736 04 07 F8 03 FE 00 01 1F =548
31744 FE 00 03 1F FF 01 00 01 =545
31752 07 FE 00 04 0F FF 03 FE =792
31760 0F F8 00 06 1F FC 01 FF =808
31768 01 C0 1F FE 00 03 1F FF =767
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31848 03 FF 01 F0 03 FF 01 07 =765
31856 FE 00 01 FF 01 FC 00 03 =766
31864 1F F0 00 01 03 FF 01 C0 =723
31872 07 FF 03 F8 07 FF 01 F0 =1016
31880 01 FF 03 C0 1F FF 01 C0 =930
31888 00 01 0C 00 01 1F FF 02 =302
31896 FC 00 FF 00 00 00 00 00 =507
STOP
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The Hex Data II

Here's the second set of Hex data, named ALIEN. Enter it and save it five seconds after the SCREEN data with SAVE "ALIEN" CODE 32100,3990.

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32100 CD F4 84 3E 64 32 19 87 =953
32108 3E 03 32 07 87 21 00 00 =290
32116 22 17 87 21 25 87 06 06 =409
32124 36 30 23 10 FB 3E 0F 32 =531
32132 48 5C 06 19 21 73 89 36 =534
32140 00 23 10 FB 21 90 5C 36 =625
32148 FF 2B 2B 36 FF 3E 32 32 =812
32156 1D 87 AF 32 1F 87 21 30 =636
32164 30 22 2E 87 3E 30 32 2E =469
32172 87 32 2F 87 3E 05 32 14 =504
32180 87 3E 13 CD EF 7E 21 30 =867
32188 87 22 20 87 CD 9B 85 CD =1034
32196 EB 7D CD F4 84 3E 18 CD =1232
32204 EF 7E ED 4B 17 87 C9 3E =1098
32212 19 CD EF 7E 06 0A C5 60 =904
32220 11 0A 00 CD B5 03 CD 0F =636
32228 85 CD 69 85 C1 10 EF 3A =1082
32236 14 87 C6 03 32 14 87 32 =611
32244 1C 87 3A 19 87 D6 04 30 =647
32252 02 3E 01 32 19 87 32 0A =335
32260 87 3A 1F 87 3C 32 1F 87 =635
32268 2A 2E 87 7C FE 39 38 03 =717
32276 2C 26 2F 24 22 2E 87 18 =404
32284 00 CD FF 7E 21 92 88 11 =918
32292 03 00 3A 14 87 36 01 19 =296
32300 3D 20 FA CD 2A 84 CD F4 =1171
32308 84 06 11 21 73 89 11 05 =462
32316 00 36 00 19 10 FB 3A 14 =424
32324 87 47 DD 21 92 88 C5 DD =1160
32332 7E 00 FE 00 28 28 CD E1 =890
32340 84 16 40 5F CD 4C 84 FE =980
32348 0F 20 F3 ED 4B 1A 87 DD =984
32356 70 00 CB 43 28 03 DD 71 =759
32364 00 DD 73 01 DD 36 02 40 =678
32372 2A 05 87 CD F5 83 01 03 =767
32380 00 DD 09 C1 10 C8 3E 10 =717
32388 32 9E 86 11 CF 50 ED 53 =966
32396 0D 87 ED 53 0F 87 CD 93 =970
32404 7F CD 22 85 CD F3 80 3A =1133
32412 07 87 11 FF 50 F5 D5 21 =985
32420 9B 86 0E 0F CD C8 84 D1 =1064
32428 1D 1D F1 3D 20 EF CD 9B =991
32436 85 06 20 C5 CD EF 85 C1 =1138
32444 10 F9 21 61 88 CD E1 84 =1093
32452 FE 80 38 03 21 79 88 22 =765
32460 20 87 ED 5B 0D 87 0E 0F =672
32468 21 9B 86 CD C8 84 AF DB =1253
32476 FE E6 1F FE 1F 20 F7 AF =1254
32484 DB FE E6 1F FE 1F 28 F7 =1306
32492 C3 BF 7F 32 A2 FE CD E8 =1416
32500 FD C5 0E 96 10 FE 0D 20 =929
32508 FB C1 C9 3E 12 32 1E 87 =940
32516 CD 13 7F ED 43 1A 87 22 =850
32524 05 87 ED 53 20 87 C9 3A =886
32532 1F 87 11 9B 87 21 3D 86 =701
32540 06 CC 0E C4 3D C8 11 B5 =879
32548 87 06 CC 0E C5 3D C8 11 =834
32556 D0 87 21 63 86 06 CC 0E =833
32564 CC 3D C8 11 FC 87 06 C5 =1072
32572 0E C5 3D C8 F5 3E 11 32 =846
32580 1E 87 F1 11 14 88 21 A3 =775
32588 86 06 84 0E 84 3D C8 06 =685
32596 8C 0E 88 3D C8 F5 3E 12 =876
32604 32 1E 87 F1 11 9B 87 21 =796
32612 3D 86 06 C4 0E CC 3D C8 =876
32620 F5 3E 12 32 1E 87 F1 11 =798
32628 4B 88 21 87 86 06 CC 0E =737
32636 C5 3D C8 06 CC 0E C5 3D =940
32644 C8 3A 14 87 C6 0A 32 14 =691
32652 87 AF 32 1F 87 18 80 21 =711
32660 8E 03 06 64 E5 C5 4E 23 =790
32668 7E 23 E6 7F 47 E5 CD E5 =1252
32676 22 E1 C1 10 F0 06 1E E1 =969
32684 C5 4E 23 7E 23 E6 1F C6 =930
32692 80 47 E5 CD E5 22 E1 C1 =1314
32700 10 EE C9 3E BF DB FE CB =1384
32708 67 20 08 3E FD DB FE CB =1134
32716 4F 20 F8 CD F3 80 CD 9F =1299
32724 81 CD E1 84 FE FE CC FB =1654
32732 81 CD 69 85 CD 93 7F 3A =1109
32740 1C 87 FE 00 CA D3 7D 3A =1013
32748 1D 87 FE 0A 30 0C DD 21 =742
32756 C3 89 DD 7E 00 FE 00 CC =1137
32764 10 82 CD 7B 83 CD BD 82 =1129
32772 CD 2A 84 3A 0A 87 32 15 =653
32780 87 CD BD 82 3A 13 87 FE =1125
32788 8A 28 11 ED 5B 0D 87 CD =876
32796 4C 84 FE 7A CC 3E 81 FE =1233
32804 0F C2 62 82 CD 4A 80 ED =1081
32812 5B 0D 87 CD 4C 84 FE 7A =1028
32820 D5 CC 3E 81 D1 3A 13 87 =1029
32828 4F 21 9B 86 CD C8 84 CD =1143
32836 54 1F D0 C3 BF 7F 3E 0F =913
32844 32 13 87 3A B0 5C FE 01 =785
32852 20 44 3E EF DB FE CB 47 =1148
32860 CC 87 82 3E EF DB FE E6 =1473
32868 06 FE 06 28 11 3A 1D 87 =545
32876 FE 00 28 0A D6 01 32 1D =598
32884 87 3E 8A 32 13 87 3E EF =840
32892 DB FE CB 67 20 0C 3E EF =1124
32900 DB FE CB 5F C8 CB D8 C3 =1585
32908 DB 80 3E EF DB FE CB 5F =1419
32916 C0 CB C0 C3 DB 80 3E E7 =1422
32924 DB FE CB 4F CC 87 82 3E =1286
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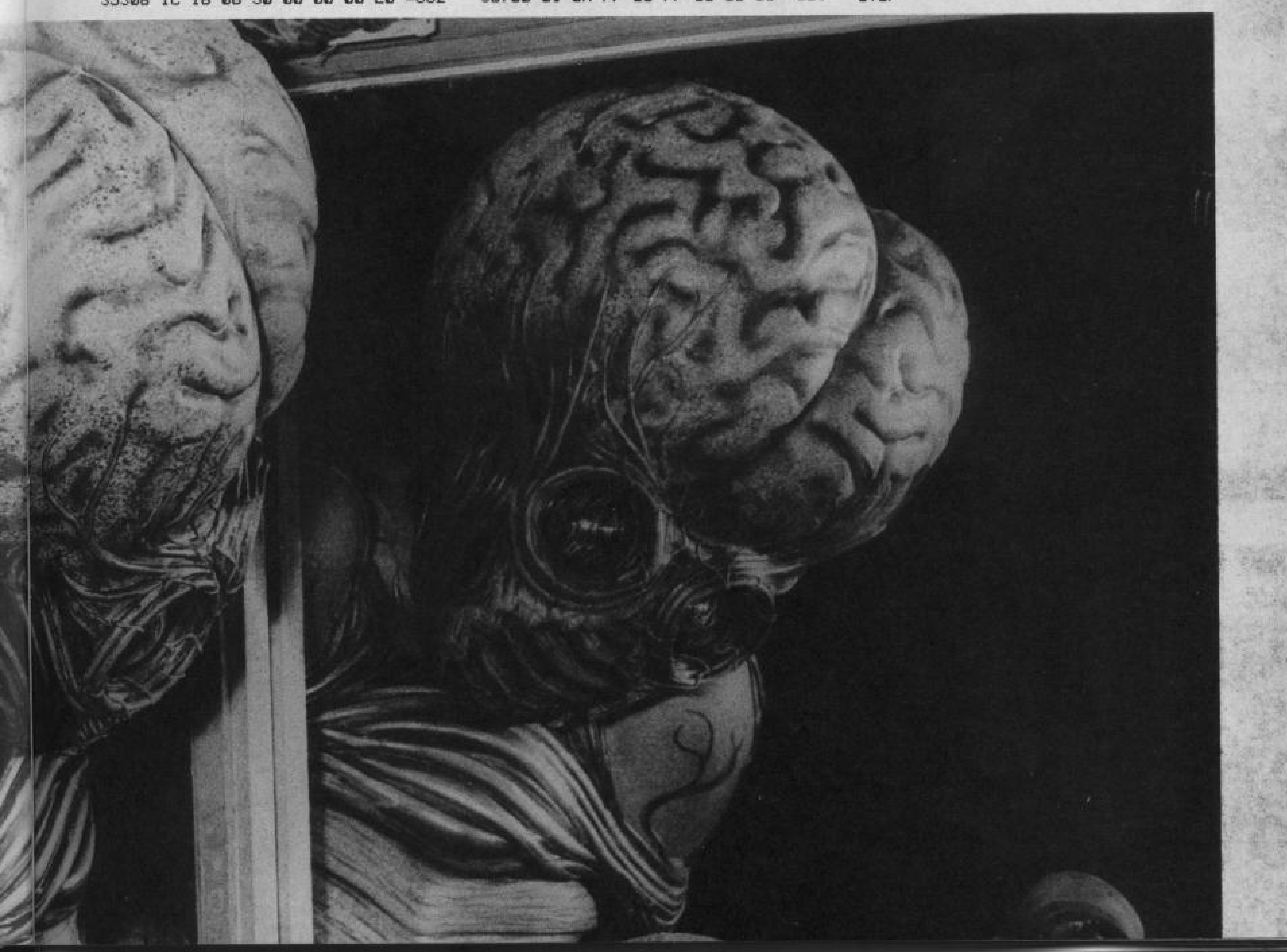
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32932 7E DB FE E6 1F FE 1F 28 =1185
32940 11 3A 1D 87 FE 00 28 0A =543
32948 D6 01 32 1D 87 3E 8A 32 =679
32956 13 87 3E F7 DB FE CB 47 =1210
32964 20 0C 3E EF DB FE CB 47 =1092
32972 C8 CB D8 C3 DB 80 3E EF =1462
32980 DB FE CB 47 C0 CB C0 ED =1571
32988 5B 0D 87 0E 0F 21 D5 86 =648
32996 D5 C5 CD C8 84 C1 D1 CD =1554
33004 38 84 ED 53 0D 87 C9 3A =915
33012 1D 87 F5 CB 3F CB 3F CB =1144
33020 3F FE 00 11 E0 50 28 10 =694
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33044 F1 E6 07 FE 00 28 08 47 =851
33052 AF 37 1F 10 FC E6 AA 06 =935
33060 08 12 14 10 FC 3A 1D 87 =536
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33076 21 E0 5A 06 0C 71 23 10 =529
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33092 E8 FD 3E 08 32 84 5C DD =1050
33100 21 73 89 06 11 DD 7E 00 =655
33108 FE 00 28 12 DD 7E 01 BB =847
33116 20 0C DD 7E 02 BA 20 06 =617
33124 DD 36 00 00 18 09 C5 01 =506
33132 05 00 DD 09 C1 10 DE 06 =672
33140 0A C5 26 00 68 11 01 00 =367
33148 CD B5 03 C1 10 F3 ED 5B =1169
33156 0D 87 21 9B 86 0E 0F CD =704
33164 C8 84 3A 1D 87 C6 0F FE =1021
33172 61 38 02 3E 60 32 1D 87 =527
33180 3E 0F C9 DD 21 73 89 06 =790
33188 11 DD 7E 00 CB 7F C4 B5 =1071
33196 81 11 05 00 DD 19 10 F1 =654
33204 C9 C5 DD 5E 01 DD 56 02 =1023
33212 D5 21 D5 86 0E 0F CD C8 =1027
33220 84 D1 C1 C5 DD 46 00 CD =1227
33228 38 84 7A FE 40 20 0D 7B =796
33236 E6 E0 FE 00 20 06 DD 36 =1021
33244 00 00 C1 C9 DD 73 01 DD =952
33252 72 02 DD 6E 03 DD 66 04 =777
33260 ED 5F CB 4F 28 04 01 0A =669
33268 00 09 CD F5 83 C1 C9 DD =1205
33276 21 73 89 06 0F DD 7E 00 =653
33284 CB 7F 28 08 11 05 00 DD =621
33292 19 10 F2 C9 DD 36 00 84 =891
33300 16 40 ED 5F 5F CD 4C 84 =926
33308 FE 0F 20 F4 DD 73 01 DD =1103
33316 72 02 21 B7 86 DD 75 03 =807
33324 DD 74 04 4E CD C8 84 C9 =1157
33332 DD 21 73 89 06 0F DD 7E =874
33340 00 CB 7F 28 0A D5 11 05 =615
33348 00 DD 19 D1 10 F0 C9 DD =1133
33356 36 00 84 DD 73 01 DD 72 =858
33364 02 21 29 86 DD 75 03 DD =772
33372 74 04 CD C7 81 C9 AF 21 =1062
33380 00 58 77 11 01 58 01 DF =537
33388 02 ED B0 3D 20 F1 3E 1A =837
33396 32 A2 FE CD E8 FD 3A 07 =1221
33404 87 3D 32 07 87 FE 00 C8 =842
33412 C3 2F 7E 3A 9E 86 FE 00 =972
33420 C8 3A 1D 87 FE 00 CB 3D =937
33428 32 1D 87 FE 0A CC FB 81 =1062
33436 06 05 C5 60 11 01 00 CD =527
33444 B5 03 C1 10 F5 AF 32 9E =1021
33452 86 ED 5B 0D 87 ED 53 0F =945
33460 87 21 21 86 0E 0F CD AD =742
33468 84 3A 9E 86 FE 00 C0 ED =1165
33476 5B 0F 87 CD 4C 84 FE 0F =923
33484 20 3A D5 21 21 86 0E 0F =532
33492 CD AD 84 D1 06 02 CD 38 =988
33500 84 FE 0F 20 27 ED 53 0F =807
33508 87 21 21 86 0E 0F D5 CD =782
33516 AD 84 D1 7B E6 E0 FE 00 =1345
33524 C0 7A FE 40 C0 3E 10 32 =952
33532 9E 86 21 D3 86 4E 23 23 =818
33540 CD C8 84 C9 ED 53 0F 87 =1208
33548 3A 14 87 47 21 92 88 C5 =796
33556 7E CB 7F 28 12 23 4E 23 =662
33564 46 23 7A B8 28 0E C1 10 =674
33572 EE 3E 10 32 9E 86 C9 23 =894
33580 23 23 18 F2 7B B9 28 11 =701
33588 C5 D1 E5 CD 93 84 E1 D5 =1557
33596 C1 ED 5B 0F 87 7B B9 20 =1011
33604 DD 2B 56 2B 5E 2B 36 00 =584
33612 CD 47 85 C1 E5 DD E1 CD =1482
33620 17 84 3A 1E 87 32 A2 FE =844
33628 CD E8 FD 3E 10 32 9E 86 =1110
33636 CD 0F 85 3A 1C 87 3D 32 =685
33644 1C 87 3A 0A 87 FE 06 38 =682
33652 02 D6 03 32 0A 87 C9 3A =673
33660 14 87 47 DD 21 92 88 C5 =959
33668 DD 7E 00 CB 7F 28 52 CD =1004
33676 17 84 DD 46 00 CB 70 28 =801
33684 04 ED 5F A0 47 CD 38 84 =960
33692 DD 73 01 DD 72 02 2A 05 =721
33700 87 CD E1 84 CB 47 28 13 =1030
33708 D5 23 7E 2B C6 09 E6 1F =885
33716 FE 0A 28 02 3E 12 5F 16 =503
33724 00 19 D1 CD F5 83 3A 1E =903
33732 87 FE 11 28 14 CD E1 84 =1028
33740 FE F0 38 0D DD E5 DD 5E =1328
33748 01 DD 56 02 CD 34 82 DD =918
33756 E1 11 03 00 DD 19 C1 CB =887
33764 60 C4 EB 83 10 99 C9 DD =1249
33772 E5 C5 CD BD 82 C1 DD E1 =1589
33780 C9 3E 89 D3 FE 3E 09 D3 =1147
33788 FE D5 4E 23 3E 01 BE 23 =868
33796 28 0C C5 D5 CD C8 84 D1 =1208
33804 E5 CD 93 84 E1 C1 CD C8 =1536
33812 84 D1 C9 DD 5E 01 DD 56 =1165
33820 02 2A 05 87 23 7E 21 D4 =590
33828 86 77 2B C3 F5 83 3A 15 =946
33836 87 06 00 10 FE 3D 20 F9 =753
33844 CD BD 82 C9 CB 40 C4 93 =1335
33852 84 CB 48 C4 80 84 CB 50 =1146
33860 C4 5C 84 CB 58 C4 9F 84 =1198
33868 D5 E1 7C E6 18 CB 2F CB =1269
33876 2F CB 2F C6 58 67 7E C9 =1013
33884 7A FE 50 28 13 7B C6 20 =868
33892 5F D0 7A C6 08 57 FE 58 =1060
33900 C0 7B C6 20 5F 16 40 C9 =927
33908 7B E6 E0 FE C0 20 E6 7B =1408
33916 E6 1F 18 F0 7B D6 20 5F =989
33924 D0 7A D6 08 57 FE 38 C0 =1141
33932 7B C6 20 5F 16 40 C9 7B =858
33940 6F E6 E0 5F 7D 3C E6 1F =1106
33948 83 5F C9 7B 6F E6 E0 5F =1210
33956 7D E6 1F 3D E6 1F 83 5F =934
33964 C9 D5 7A E6 18 CB 2F CB =1243
33972 2F CB 2F C6 58 57 79 12 =809
33980 D1 06 08 4E 1A A9 12 14 =534
33988 23 10 F8 C9 D5 7A E6 18 =1089
33996 CB 2F CB 2F CB 2F C6 58 =1036
34004 57 79 12 D1 06 08 7E 12 =593
34012 14 23 10 FA C9 E5 C5 2A =990
34020 0B 87 46 23 3E 3F A4 67 =643
34028 78 22 0B 87 7E C1 E1 C9 =1045
34036 21 00 40 E5 D1 13 36 00 =608
34044 01 00 18 ED B0 21 00 58 =559
34052 E5 D1 13 01 00 03 36 0F =530
34060 ED B0 C9 21 17 87 34 21 =890
34068 29 87 7E FE 39 38 05 36 =728
34076 30 2B 18 F6 3C 77 21 22 =607
34084 87 11 EC 50 06 0E C5 E5 =914
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34100 11 00 3C 19 D1 D5 0E 07 =545
34108 CD C8 84 D1 1C E1 23 C1 =1227
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34124 89 DD 7E 00 FE 05 30 0A =801
34132 D5 11 03 00 DD 19 D1 10 =704
34140 F0 C9 DD 36 00 04 DD 73 =1056
34148 01 DD 72 02 C9 DD 21 C8 =993
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34164 DC 7F 85 11 03 00 DD 19 =746
34172 10 F1 C9 C5 6F 3D DD 77 =1167
34180 00 26 00 29 29 29 11 DD =399
34188 86 19 DD 5E 01 DD 56 02 =784
34196 0E 0F CD C8 84 C1 C9 2A =1002
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34212 12 87 CD BF 85 3A 12 87 =893
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34300 21 DF 58 E5 0E 08 06 20 =633
34308 E1 25 E5 B7 CB 16 2B 10 =958
34316 FB 0D 20 F2 E1 F1 3D 20 =1097
34324 DC 21 32 00 11 0A 00 CD =535
34332 B5 03 C9 0F 01 00 10 08 =425
34340 10 08 10 08 00 0E 01 00 =63
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34356 01 00 04 0E 0E 04 04 00 =41
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34396 B0 F8 4E 42 00 00 00 4D =645
34404 02 00 00 1F 37 44 44 44 =292
34412 00 00 00 F8 EC 22 22 22 =586
34420 00 4E 02 00 00 1F 39 3F =231
34428 0F 0D 19 00 00 F8 9C FC =709
34436 F0 B0 98 4D 01 18 18 7E =820
34444 E7 81 FF 7E 66 4C 01 00 =920
34452 18 7E C3 99 81 7E 66 00 =855
34460 00 00 10 10 38 FE C6 0E =554
34468 01 2E 5D F7 3E 6D FB 3E =871
34476 1A 0E 01 7A 7D 77 F6 6D =762
34484 FA 7E 5A 7A 01 FF 81 BD =1162
34492 BD BD BD 81 FF 7A 01 3E =1136
34500 3E 30 3E 3E 30 30 30 AA =548
34508 AA AA AA AA AA AA AA 0F =1205
34516 02 00 00 00 00 00 00 00 =2
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34532 00 0A 66 1F DC 1C ED 24 =664
34540 44 08 69 22 18 DB 30 82 =636
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34556 00 00 02 40 18 00 10 04 =110
34564 00 3D 86 03 5A 00 60 CB =587
34572 36 CF 50 CF 50 41 00 8A =831
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34692 20 20 20 20 20 20 20 20 =256
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34748 20 42 55 44 47 49 45 53 =547
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34860 21 21 21 21 21 21 21 21 =264
34868 21 21 21 20 41 53 54 45 =432
34876 52 4F 49 44 53 20 21 21 =483
34884 21 21 21 21 21 21 01 20 =231
34892 54 48 45 20 53 41 55 53 =573
34900 45 52 53 20 41 54 54 41 =564
34908 43 4B 2E 20 01 20 54 52 =419
34916 59 20 48 41 52 44 45 52 =559
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34932 4D 45 21 21 01 2D 2D 20 =335
34940 42 41 44 20 4C 55 43 4B =534
34948 20 45 41 52 54 48 4C 49 =553
34956 4E 47 20 2D 2D 01 C4 31 =517
34964 40 CC 55 40 CC 1F 40 CC =920
34972 23 40 CC 39 40 CC 37 40 =747
34980 C4 C9 40 CC DF 40 C5 7B =1272
34988 50 00 CA 48 00 D3 40 C5 =826
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STOP
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PROGRAM POWER

Have you written a program recently? And how many people have played it? Ten? Five? Two? What, just your mum? Isn't it about time you sent it in to YS? Here we can offer you not just tens, not even hundreds but — just for you, John, once in a lifetime offer, look I'm doing meself out of pocket — thousands and thousands of potential players! And what's more we'll pay you very well. After all, how much did your mum last give you for writing a program?

So, fill in the form below and send it with your megaprogram on cassette to Gavin Monk, Your Sinclair, 14 Rathbone Place, London W1P 1DE.

Name ....

Address ....

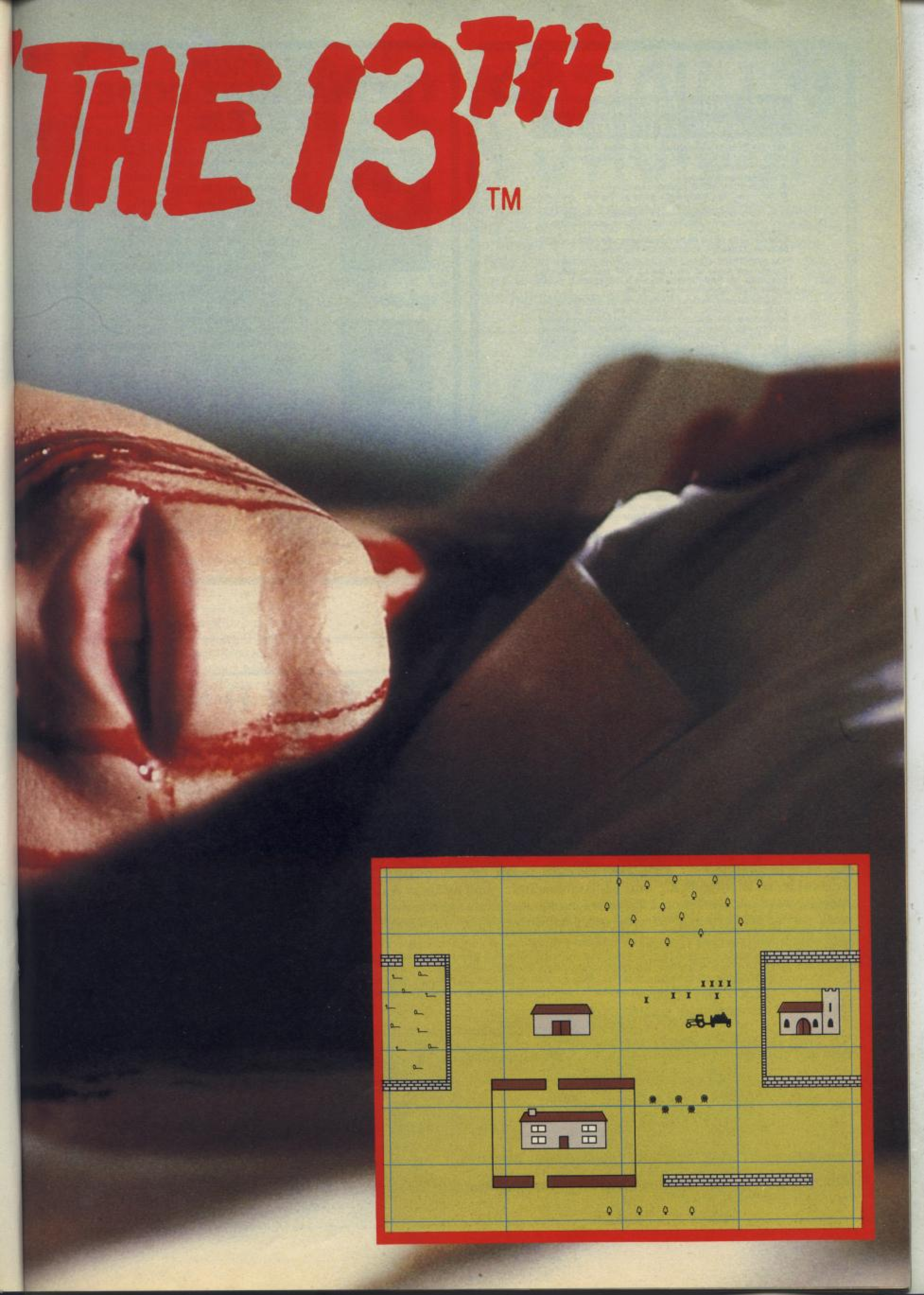
...

.... Postcode ....

Telephone Number ....

My program's called ....
and it's completely original — 'cos if it ain't I daren't think what'd happen to me...

Signed ....


THE 13TH
TM

IT'S A STICK UP!

Are you still scraping by using a keyboard on the latest arcade games — and scraping the skin off the ends of your fingers into the bargain? What you need's a 'stick to bring the joy back to your gamesplaying. To help you choose the right one for the job, we asked three YS readers to take a grip of themselves and review the top ten. Peter Shaw joined them and came in for some stick!

How d'you go about choosing a joystick? We're all guilty of believing that a joystick is a joystick is a joystick — so why not plump for the cheapest. After all, they all work in the same way, don't they? No, they jolly well don't. Even leaving aside an obvious novelty like the Suncom Joysensor, you'll find that each 'stick has its own feel, almost its own personality. (*What's yours called? Ed*). There are big 'uns and little 'uns, some with flexible shafts, others stiff. You'll come across some real neat ones and some that are just plain ugly.

And, to make things even more complicated, you'll soon suss out that a joystick that hits the heights on one game is of no earthly use on another. In an ideal world, you'd have a different joystick for every game in your collection — but then in an ideal world we'd be picking pound notes off the pavement! So, if you play more than one game, you're now faced with a very tricky bit of decision making. Do you pick a joystick that'll allow you to excel on your fave rave but only lets you plod along with pedestrian scores on the rest — or do you choose an all-rounder that'll give you better than average scores on a variety of games? But then you'll have to resign yourself to the fact that you may never receive the ultimate accolade of being chosen as one of Hex's Heroes.

Of course, for most of us, our mind's are made up by the weight of our wallets. (*What's a wallet? Ed*). But whichever way you want to choose a joystick, you'll find all the information you need in our comprehensive review of the top ten. Each 'stick; has been thoroughly put through its paces by three great games players who've been hand picked from Hex's Heroes. And then they did the rough stuff on three very different types of game — a platform, *Monty On The Run*, a hand-to-hand combat, *Way Of The Exploding Fist* and a joystick waggler, *Daley Thompson's Supertest*.

So, if you're in the market for a new 'stick, turn the page and get stuck into the full reviews from our team of joyriders.



Yikes — here's the poor *YS* readers who're in for some stick. There's Martin Covill, a 15-year-old self-confessed Madonna fan (OK you can turn the tap off and take the matchsticks out now) who hails from Canterbury. In the middle is Darren Stephens who's 13 and brought his whole family plus pets to see the *YS* office. Finally, meet Noel Wallace who lives a 55p bus ride away — so, we made him walk home , and before you tell us, we know that Noel sometimes gets hold of the wrong end of the stick. After all, anyone who needs two hands to pull on a Quickshot and can injure himself on a Joysensor is brilliant enough to replace Troubleshootin' Pete!

GIVE 'EM STICK

Talk about too much of a good thing! Even with all the reviews in front of you, it's still tricky choosing the right one for you. One way is to add up all the scores, of course. But if you're really clever, you'll use Chris Somerville's program, *Second Opinion* that appeared in *YS* 19. We tried it and came up with some very interesting results. Le Stick got into the quarter finals before being toppled and the Quickshot II and Formula II tied until reaching the final. Just take a look at our top five raves after they'd come through the mincer.

1st **Command Control** *Wico/CGL*
Formula II *Kempston*

3rd **Quickshot** *Spectravideo*

4th **Le Stick** *Lightwave Leisure*

5th **Micro Stick** *Datex*

GETTING SOME STICK

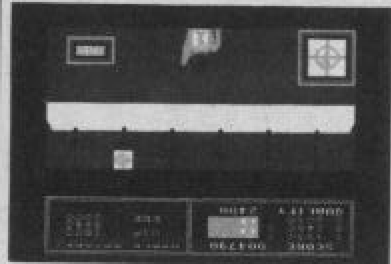
Joystick name	Price	Manufacturers name and phone number
Quickshot II	£10.95	Spectravideo Ltd. 01-330 0101
Gunshot I Kraft	£7.95 From £12.95	Vulcan Electronics. 01-203 6366
Formula I Formula II	£16.95 £11.95	Kempston Micro. 0234 856633
Micro Stick	£	Datex Ltd.
The Champion Command Control	£11.99 £27.95	CGL Ltd. 01-508 5600
LeStick	£12.99	Lightwave Leisure. No number available.
Joysensor	£19.95	Consumer Electronics. 061-682 2339

HIT & MISS STICKS

HIT (burst crosshair) / MISS (plain crosshair)

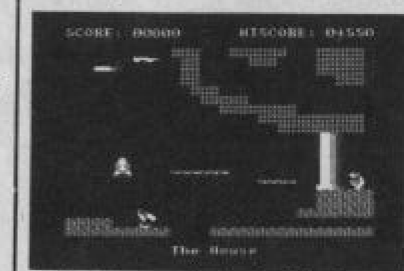
THE GAMES

Daley Thompson's Supertest *Ocean*



This is the ultimate game that'll push any joystick to its limits. If a 'stick can cope with a day's pounding from *DT* then you can be sure it's tough. And it's not just the shaft — The fire buttons need to be good too — easily accessible and very responsive for that last minute press before taking a penalty or diving from the spring board.

Monty On The Run *Gremlin Graphics*



For a platform game like this, a joystick's gonna need pinpoint accuracy so you can get as close to the edge as possible. And as you'll expect to spend a fair few hours meeting Monty's goal, you don't want a grip that'll leave you with sweaty palms and a slippery shaft. And the button had better be big so a thumb can easily be dumped on it for those long jumps.

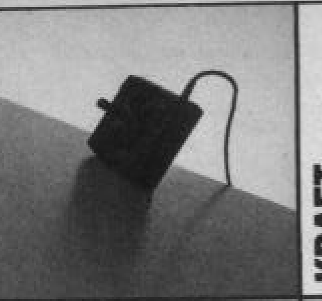
Way Of The Exploding Fist *Melbourne House*



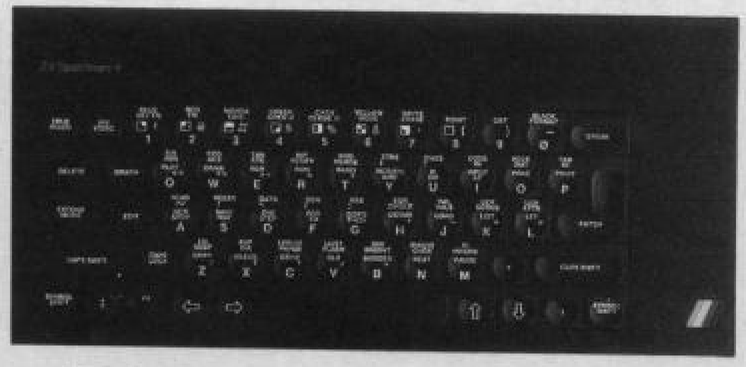
If you're ready to face the karate challenge, your joystick will need the combined powers of both shaft and button. If the shaft won't react quickly enough, or its directional flexibility is dodgy, then a joystick can be considered worthless with a game like this. Plus you'll need a fire button that's easily accessible and very responsive — or it's the chop for you, matey!

THE 'STICKS

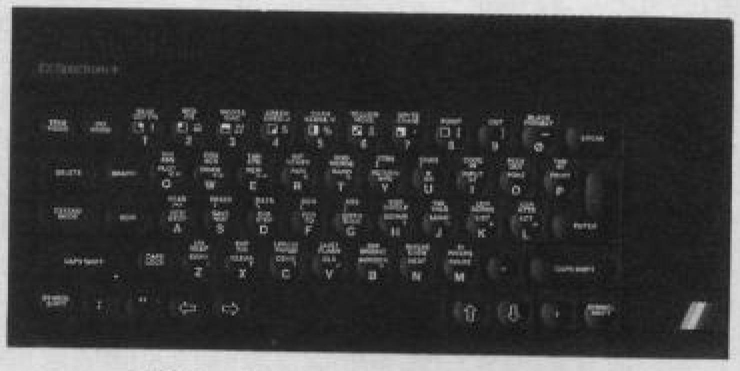
THE 'STICKS	Daley Thompson's Supertest		Monty On The Run		Way Of The Exploding Fist	
QUICKSHOT II 	**Martin** I like the reactions with this one, an' it's got some of the best positioned fire buttons of all the sticks. **On the stickometer** 8/10	HIT	**Martin** This joystick definitely works well with platform games. It's nice and accurate with a well-designed shaft. **On the stickometer** 9/10	HIT	**Martin** Hmmm, it's really easy to use with *Fist*. The reaction is good and the buttons are just right. **On the stickometer** 8/10	HIT
	Darren I don't think this joystick wanted to co-operate — and building up speed was very tricky. **On the stickometer** 2/10	MISS	**Darren** This is the one I've got at home, and I'm used to the action but that's not to say it's the best there is. **On the stickometer** 9/10	HIT	**Darren** Can't say I like this combination. Maybe it's me but it sure seems a bit unresponsive. **On the stickometer** 3½/10	MISS
	Noel The length of the shaft tires your arm out too quickly with all that waggling. Not keen on this one at all. **On the stickometer** 6/10	MISS	**Noel** OK, so it's not bad at coping with platform games, but I still reckon that the shaft is too flimsy. **On the stickometer** 6/10	MISS	**Noel** It's got a well designed grip and fire button positioning, but the movement feels too limp and flimsy. **On the stickometer** 5/10	MISS
GUNSHOT 1 	**Martin** Quite a good design but not as good as most joysticks. I don't think the omission of rapid fire matters. **On the stickometer** 6/10	HIT	**Martin** Quite a good joystick to use on the old platforms — everything seems easy to control. **On the stickometer** 8/10	HIT	**Martin** Nothing special, but the reactions are fast enough to keep up with *Fist* and the fire buttons are OK. **On the stickometer** 9/10	HIT
	Darren Not exactly a special joystick — very standard 8-directional. Still I did get some good scores with it. **On the stickometer** 7/10	HIT	**Darren** It's got an average response and all-in-all it's a pretty average joystick. Nothing to write home about. **On the stickometer** 8/10	HIT	**Darren** Well I like it. I found it very co-operative an' I'd be quite happy having one on my Speccy. So there! **On the stickometer** 9/10	HIT
	Noel Looks too much like the Quickshot for my liking, and I don't reckon it'll take the strain of *Supertest*. **On the stickometer** 5/10	MISS	**Noel** Stem seems too spindly and the grip gets as sweaty as a Bumpry's armpit. Not for me this one. **On the stickometer** 5/10	MISS	**Noel** The shaft's too spindly and I reckon it'll break if you sneeze on it. Please take it away! **On the stickometer** 5/10	MISS
FORMULA I 	**Martin** A good joystick with a good reaction time. The fire buttons are also well positioned. Where can I find fault? **On the stickometer** 9/10	HIT	**Martin** Very easy to get used to. I like the design and its accuracy overwhelmed me. I'll take one! **On the stickometer** 8/10	HIT	**Martin** Not so good for use with *Fist*. The size of the shaft seems a disadvantage. Fire buttons are nice though. **On the stickometer** 5/10	MISS
	Darren It's a good joystick — what else can I say? The colour's a bit garish but that doesn't bother me. **On the stickometer** 9/10	HIT	**Darren** Nice shaft though it could be longer and the reaction is OK. The overall effect is good. **On the stickometer** 5/10	HIT	**Darren** I think it gives you a lot of control. The fire buttons are in exactly the right position and they're *BIG*! **On the stickometer** 8/10	HIT
	Noel Oh dear, this one's deafening me! The reaction's OK, but the size of the shaft made my arm ache. **On the stickometer** 8/10	HIT	**Noel** This one went very well with *Monty*. Its reaction is very fast — not bad at all. **On the stickometer** 7/10	HIT	**Noel** Reacts quite well and the size of the fire buttons are a big plus in this joystick's favour. **On the stickometer** 8/10	HIT
FORMULA II 	**Martin** Wonderful design job and a really good response to back it up. This has it all apart for big buttons. **On the stickometer** 8/10	HIT	**Martin** Very good. The fire buttons react very well. Overall, perfect for this kind of game. **On the stickometer** 9/10	HIT	**Martin** This one seems made for *Fist*, the reaction time is good — control is easy and the fire buttons are fab. **On the stickometer** 8/10	HIT
	Darren Great stick. Well designed, good response and above all, the fire buttons are in the right place! **On the stickometer** 9/10	HIT	**Darren** It's very similar to the Gunshot. I like it, the design's very hi-tech and the reaction's fast. **On the stickometer** 8/10	HIT	**Darren** It's great. The case design is very smart and the reaction time is good too — I'm tempted to get one. **On the stickometer** 10/10	HIT
	Noel This one's too flimsy. I prefer a good stiff stem, and this joystick definitely hasn't got what it takes. **On the stickometer** 3/10	MISS	**Noel** It's still too flimsy for my liking but it works well with *Monty* though. **On the stickometer** 6/10	MISS	**Noel** It's really too flimsy. I know I keep going on about it but I rather hold a piece of raw liver than this joystick. **On the stickometer** 6/10	MISS

	**KRAFT**	**Martin** Don't think much of this one. The design's too fragile and it just ain't good with *Supertest*. **On the stickometer** . . . 3/10	**Martin** I don't rate this joystick at all. The response is OK but I find it too fragile for the game. **On the stickometer** . . . 2/10	**Martin** Reactions are quick enough but the shaft's too small. You won't find me buying one. **On the stickometer** . . . 3/10
		Darren I reckon it's good. I prefer the small 'sticks as long as the control's still in there. **On the stickometer** . . . 9/10	**Darren** It's a good joystick. I like this design more than most and the shaft's very comfortable. **On the stickometer** . . . 10/10	**Darren** Pretty good — it responds well with this game. I like the four-way, eight-way feature. **On the stickometer** . . . 8/10
		Noel This joystick is just right for *Supertest*. A short shaft means less work for me and it's tough enough. **On the stickometer** . . . 8/10	**Noel** Oh, it's horrible — *Monty*, just doesn't work with it. I'd get more response from a garden gnome. **On the stickometer** . . . 4/10	**Noel** Shock, horror — it reacts quite well with *Fist*. You wouldn't think it was the same joystick. **On the stickometer** . . . 6/10
	**MICRO STICK**	**Martin** Not much cop for this sort of game. The rotation of the shaft makes it pretty awkward to use. **On the stickometer** . . . 5/10	**Martin** It's too stiff, very slow and unresponsive. But the design is quite good so I'll be gentle. **On the stickometer** . . . 5/10	**Martin** Don't like it a great deal, it's a bit too stiff. You get massacred using this one for *Fist*. **On the stickometer** . . . 4/10
		Darren Don't really like this one — the fire button is much too stiff to be of any use in this game. **On the stickometer** . . . 7/10	**Darren** Better in this game, possibly because everything doesn't go so fast. Still not impressed. **On the stickometer** . . . 7/10	**Darren** Oh dear . . . maybe the fire button has actually packed up. Not a good mark in my book. **On the stickometer** . . . 5/10
		Noel Well it's very nice but it tires your arm out after only a few waggles of the shaft. **On the stickometer** . . . 7/10	**Noel** It's quite good. It's got fast action and a good grip design. I like it even if they don't. **On the stickometer** . . . 8/10	**Noel** Quite a good joystick (*The fire button must still have been working! Ed*). Good response. **On the stickometer** . . . 7/10
	**THE CHAMPION**	**Martin** It's got nice fire buttons and a good reaction but it doesn't seem to work with *Supertest* too well. **On the stickometer** . . . 5/10	**Martin** It's very pretty but I don't think much of the overall effect. The controls seem a bit dodgy. **On the stickometer** . . . 4/10	**Martin** It's a pretty design but being left handed I find it quite awkward to use. **On the stickometer** . . . 5/10
		Darren Well it's easy to grip and easy to fire. I quite like the stylish design too. **On the stickometer** . . . 7/10	**Darren** It's a smooth joystick, but I don't reckon it works too well with this game. **On the stickometer** . . . 6/10	**Darren** Another one of the joysticks has packed up on me this time the directional controls are up the spout! **On the stickometer** . . . 3/10
		Noel It's got very quick reactions and an excellent grip. I'll go for this one any day. **On the stickometer** . . . 8/10	**Noel** It's the best designed joystick of the pack and to top that the reaction speed is fast too. **On the stickometer** . . . 8/10	**Noel** It's got quite good reactions and responsive diagonal controls. Good joystick. **On the stickometer** . . . 8/10
	**LE STICK**	**Martin** Oh it's so *easy* to win on Supertest — you only have to shake the joystick vigorously! **On the stickometer** . . . 10/10	**Martin** It's a lot of hard work stopping Monty running into things when you haven't got a leg to stand on. **On the stickometer** . . . 6/10	**Martin** Terrible! Very hard to judge where it is and diagonals are nigh-on impossible to achieve. **On the stickometer** . . . 2/10
		Darren Excellent joystick to use with *Supertest* — I've got my best score ever on nearly all the games. **On the stickometer** . . . 10/10	**Darren** It's much too awkward to use in this game — you really can't control what's happening. **On the stickometer** . . . 5/10	**Darren** I think it's quite good but if you get too excited then you might lose track of where you are. **On the stickometer** . . . 8/10
		Noel Ideal for this game, you only need to wiggle the joystick — it's that simple! **On the stickometer** . . . 10/10	**Noel** Ooops — no good for Monty as he keeps running off the end of all the platforms. **On the stickometer** . . . 3/10	**Noel** Very slow reacting — I reckon it's a miss for *Fist*. (*More, Adrian Mole poetry huh? Ed.*) **On the stickometer** . . . 4/10
	**COMMAND CONTROL**	**Martin** Well it's a good joystick and it's got a decent sized base to grab hold of. Bigger is better, eh? **On the stickometer** . . . 8/10	**Martin** Directional control on this joystick is quite good. Unfortunately the top button lets it down. **On the stickometer** . . . 6/10	**Martin** A good stick with an easy-to-handle shaft but the choice of either top or bottom fire button is naff. **On the stickometer** . . . 7/10
		Darren I don't think the vigorous action of *Supertest* is going to do this one any favours! **On the stickometer** . . . 5/10	**Darren** The shaft's the right size, it's the right shape and offers good control. Just right for platforms. **On the stickometer** . . . 9/10	**Darren** The buttons are good although I'd have preferred to use both. Works well with *Fist* though. **On the stickometer** . . . 9/10
		Noel Brilliant joystick to use with *Supertest* — very sturdy and reactions are fast. **On the stickometer** . . . 9/10	**Noel** Well apart from getting a little too sweaty in my paw, this one works really well. **On the stickometer** . . . 8/10	**Noel** You can really kick the proverbial out of the other player with this stick. Very responsive! **On the stickometer** . . . 9/10
	**SUNCOM JOYSENSOR**	**Martin** Ugh, it's terrible. Too much like using a ZX81 keyboard. There's no real control at all. **On the stickometer** . . . 1/10	**Martin** Even worse than with *Supertest*. The movement control is absolutely tosh. Double ugh! **On the stickometer** . . . 1/10	**Martin** It's not really very practical. As joysticks go, this one's more of a novelty than anything. **On the stickometer** . . . 2/10
		Darren It's really useless for this game — how can you do left/right quickly on a membrane? **On the stickometer** . . . 4/10	**Darren** It's not quite right for platforms somehow, but it was great fun trying! **On the stickometer** . . . 6/10	**Darren** Seems to work better with *Fist* than with any of the other games. Quite a good score with this one. **On the stickometer** . . . 8/10
		Noel It reacted well but took the skin off the end of me finger while rubbing. **On the stickometer** . . . 6/10	**Noel** It's useless with platforms as you can't change direction accurately enough. **On the stickometer** . . . 4/10	**Noel** Reacts really well. I've just beaten my all-time high score. I might even buy one! **On the stickometer** . . . 9/10

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SCOOP PREVIEW

BLADE RUNNER

Transported to the 21st century, Peter Shaw braved the icy wastelands of Carpenters Road, Stratford. There he stole the storyboard for CRL's new megagame, Blade Runner.

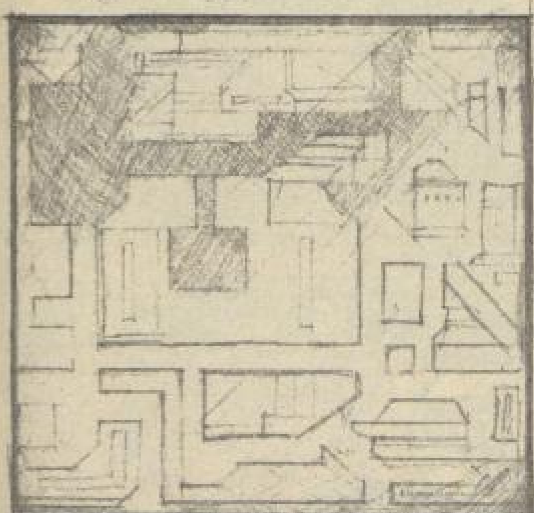




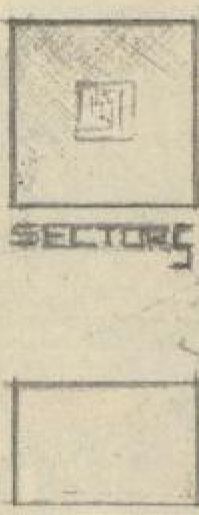
Los Angeles, Sector 5. *The match spurted to life, briefly illuminating the interior of my Spinner. I drew deeply on the Marlboro. This was gonna be tough — tougher than the Fats Cox Caper. Outside the rain slank down. A night to rust any replicoids circuits. If only it was that easy to air out those more than human robots . . . Somewhere in the dark four droids were out to eliminate their creators, the cyberneers. It was my job to 'retire' them before the deed was done. It would be a dirty business. But then, for me, Deckard, killer, cop and bladerunner, dirt was my business. I was a bin man.*



It'd be a messy mission. I was all ready to cash my chips for an early retirement when the Reps alarm sounded. And now they'd called me up for just one hit more before I could draw my pension. If I wasn't successful with this then they wouldn't let me hang up my retros.

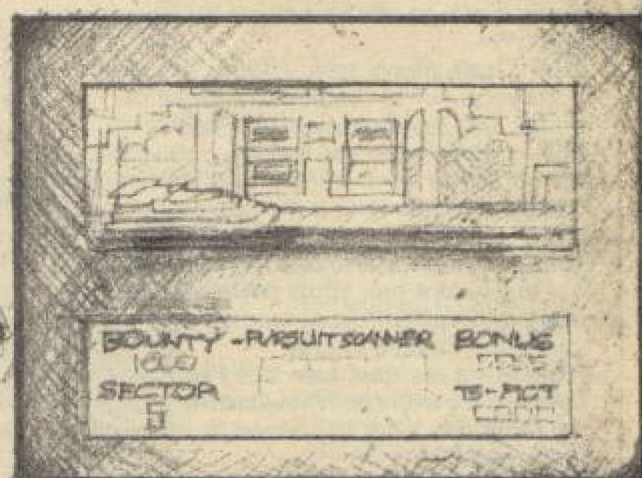


Here's the main on-screen view of your Spinner's control panel. You'll find here your own location and that of the reps and cyberneers.





Before landing, your Spinner gently hovers down to street level. Now run along and locate your targets.



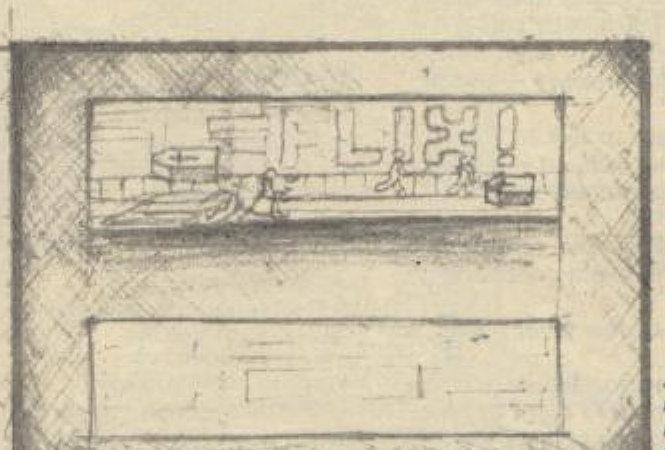
There's nine sectors to this hell hole of a town. Of all the sectors, of all the cities in all the cosmos the Reps have to hang out there. The monitor in my Spinner will locate them, but only if I'm in their sector . . . I gotta go . . . there's one now . . .

I pulled up the Spinner here. On this level the Reps are pretty dumb . . . pretty, but dumb . . . like the blonde I met down at Rick's place . . . heh, now where's my wallet? These Reps get very confused at corners — so catching up with one is as easy as taking candy from a baby.



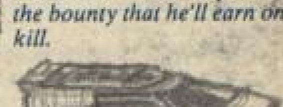
Down on the sidewalks you have to avoid the oncoming Spinners and pedestrians. Over the years as cop and killer there's not a lot you don't pick up on the streets. Savvy? Your best bet is to run along the gutter. They don't teach green horns that at the Academy. The Reps will usually run into your firing line through pure ignorance.





The Nexus 1 Replidroids are really slow — so slow it takes fifty of 'em to change a light globe — you don't need me to tell you why. On level 4 they start firing back. She was good, real good — but then you don't need me to tell you why. On top level, Nexus 6, you've got to be the best of Bladerunners to get any of them.

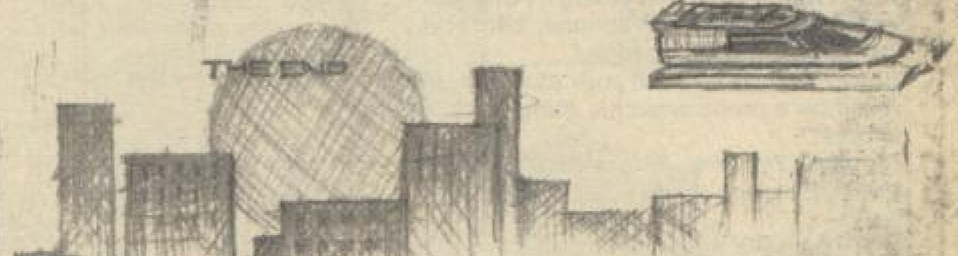
All the info a Bladerunner needs appears at the bottom of the screen — most importantly the bounty that he'll earn on a kill.



The city streets are full of danger. Avoid other Spinners and being trampled by the confused crowds.



And another one bites the dust. The Reps go down on Nexus 1 faster than Bacall does on Bogart in The Big Sleep. But to reach my retirement salary, I have to pass Nexus 6. Blade Running is really bounty hunting with a fancy name. I give Replidroids a taste of paradise.



Deckard fought bravely through the six levels of Nexus Replidroids. He sustained injuries that could've proved fatal. But once he'd reached that retirement figure he slipped aboard his Spinner to level the city for the last time. Ex-cop, ex-killer, ex-bladerunner . . . until the next time.

Screenplay	**Rick Robson**
Research, Best Boy and Grip	**Pete Shaw**
Camera	**Martin Dixon**
Continuity	**Teresa Maughan**
Gaffer	**The Ed**

THE YOUNG ONES

Hey guys! This is really heavy man — I dreamt I was put into a computer game. Oh wow, technofear! *YS* girlie *Teresa Maughan* gets into the groove, man!

Rick *"Hi there kids. It's me Uncle Rick just itching to tell you about* The Young Ones *game that's gonna be out on the Spectrum soon!"*
Neil *"Yeah, heavy man. Seems, like, we've gotta race out of the house with all our things and the first one out wins."*
Mike *"Steer clear you guys — you've got the choice of controlling any of us but take it from me Mikie's the coolest!"*
Vyvyan *"Shut up pizza-face! Those complete-and-utter-bastards are trying to get out before me. You'd better get me out first or I'll cut both your legs off and then you'd be 'armless. Ha Ha!"*
Neil *"It's a real bummer 'cos I've been dumped on with the wheelbarrow to put my things in. What happened to peace and unity, man?"*
Rick *"That's 'cos you're a stupid hippie-pants and you smell. Ha Ha Ha eh you nerdies?"*
Mike *"Cool it guys, just cool it!"*
Vyvyan *"Well I'd just like to say if anybody moves out of this house before me I'll kill him. Yes and then I'll mash up his brains and feed them to SPG!"*
Rick *"Crikey I think I'm going to be sick!"*
Vyvyan *"Shut-up you girly-face pervert!"*
Neil *"Oh wow! We can talk to each other, like, with speech bubbles. Heavy — this is communication man."*
Rick *"Why would I want to talk to you farty breath? Ha! This is brilliant — I can open nearly everything and see what's inside. Right mateys?"*
Mike *"Ugh! Like a pair of your soiled underpants. The idea is to stay cool and grab what you need."*
Vyvyan *"Scumbags! I know what I need, a drink!"*
Mike *"Mike the cool person would just like to say we've got to complete eight or nine tasks in order to get all the objects we need."*
Neil *"Wow there's everything in this game, my lentils, bogies, a telephone, kitty and yeah Rick's anarchy badge."*
Rick *"I can try and get your stuff too, that would be a pretty anarchic thing to do eh nerdies?"*
Vyvyan *"You girly. You wouldn't know if your belongings came and farted in your face."*
Neil *"Yeah, he would. This game is full of clues and the poster gives hints too. Wow!"*
Mike *"But you've gotta be cool to spot them. I need the loud tie."*
Rick *"And I need the girly dress."*
Neil *"Heavy, heavy, heavy."*
Vyvyan *"Well I would like the bomb to kill everyone with. Berilliant!"*
Rick *"Nob-face! What did you set it off for?..aaaaaarrrrggggghhh!"*

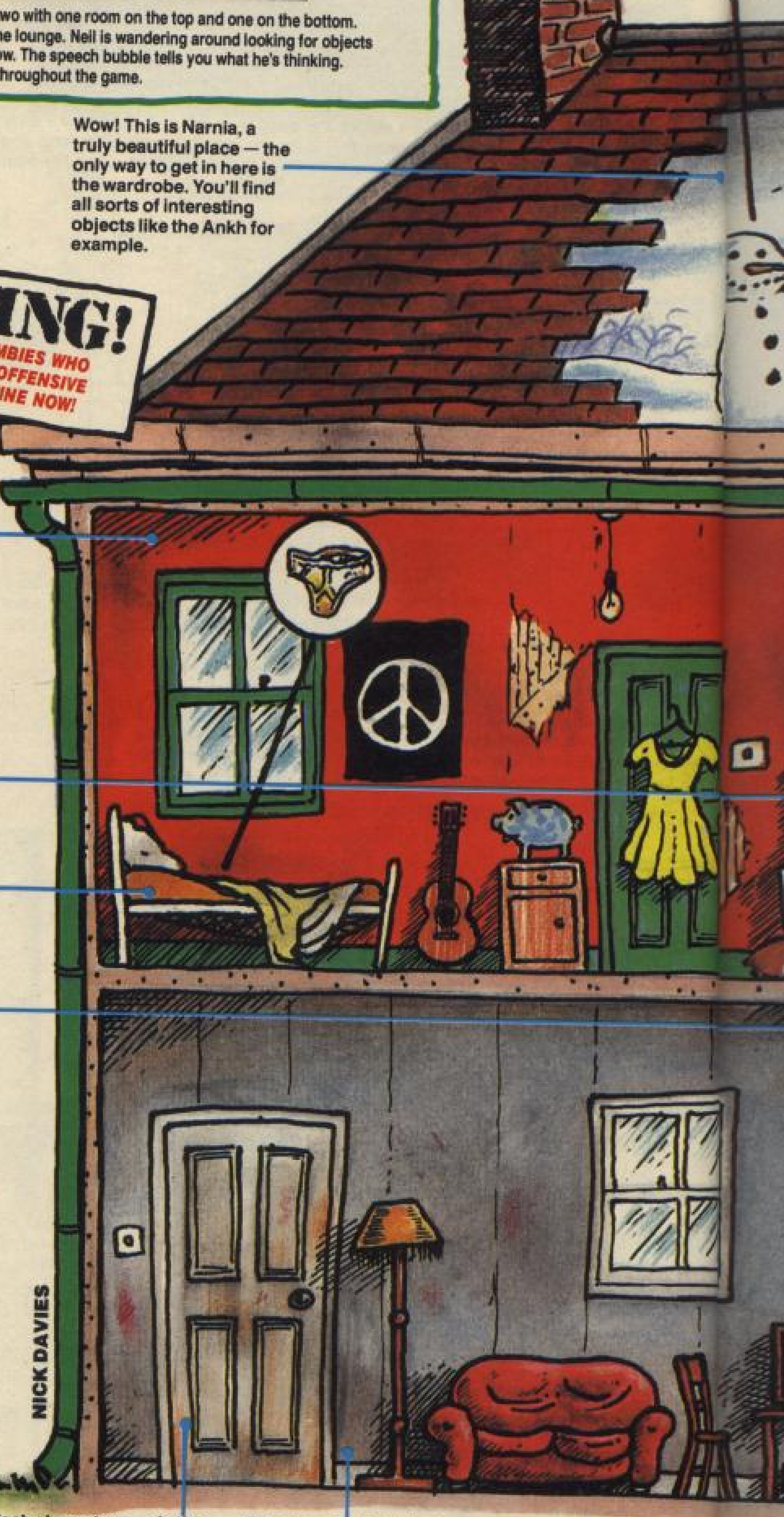


Wow! If this is what the game looks like I'll eat my festering socks. Yeah, it's amaaazing. It's a total freakout with plenty of heavy vibes. Far out, like me. Wow I feel like I'm floating above my body looking down on what I'm doing... really transcendental!



Each screen is split into two with one room on the top and one on the bottom. Here's Mike's room and the lounge. Neil is wandering around looking for objects to put into his wheelbarrow. The speech bubble tells you what he's thinking. These will provide clues throughout the game.

WARNING!
FOR ALL YOU NAMBY PAMBIES WHO MAY FIND THIS PREVIEW OFFENSIVE SWITCH OFF YOUR MAGAZINE NOW!



Wow! This is Narnia, a truly beautiful place — the only way to get in here is the wardrobe. You'll find all sorts of interesting objects like the Ankh for example.

It's totally anarchic in Rick's bedroom. There's a piggy bank, guitar and girly dress amongst other things. The dress'll come in handy if you're a transvestite — crikey!

Fantastic, a record player. If you don't fancy the musical accompaniment just turn it off. Rick will keep turning it on again so you'll just have to smash it to pieces. Serve that girly right!

Rick's bed — pooh! If you've got a strong stomach try opening it. Bet you wish you hadn't now — it's a pair of filthy underpants — sick!

These guys are so mad they don't care what they do! They've got an animal — SPG even though the lease says 'no pets'. Maybe he'll come in handy for one of the tenants.

- Switch on the TV for a clue as to what to do. The adverts are often more interesting than the programmes and give you hints.

Life is for living 100 percent
Feed your cat don't pay the rent
He will love our frozen peas
It'll open the sluices and kill the fleas.
This ad gives you a bird's eye view on what to do with the peas.

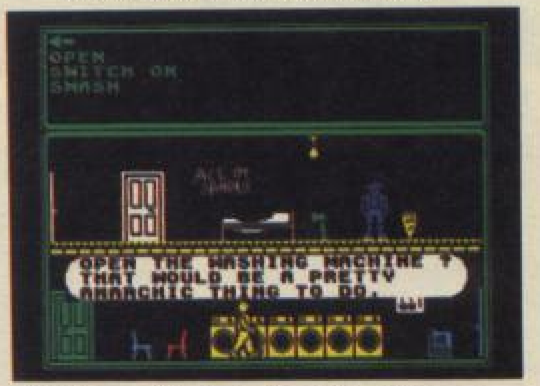
Each character needs the right container to carry all his belongings out of the house. Vyvyan uses the bin liner for his junk. Maybe he could get rid of Rick, Mike and Neil too!

This room certainly looks pretty lived in — more like died in really. Oooh a sofa, lamp, walkman and television.

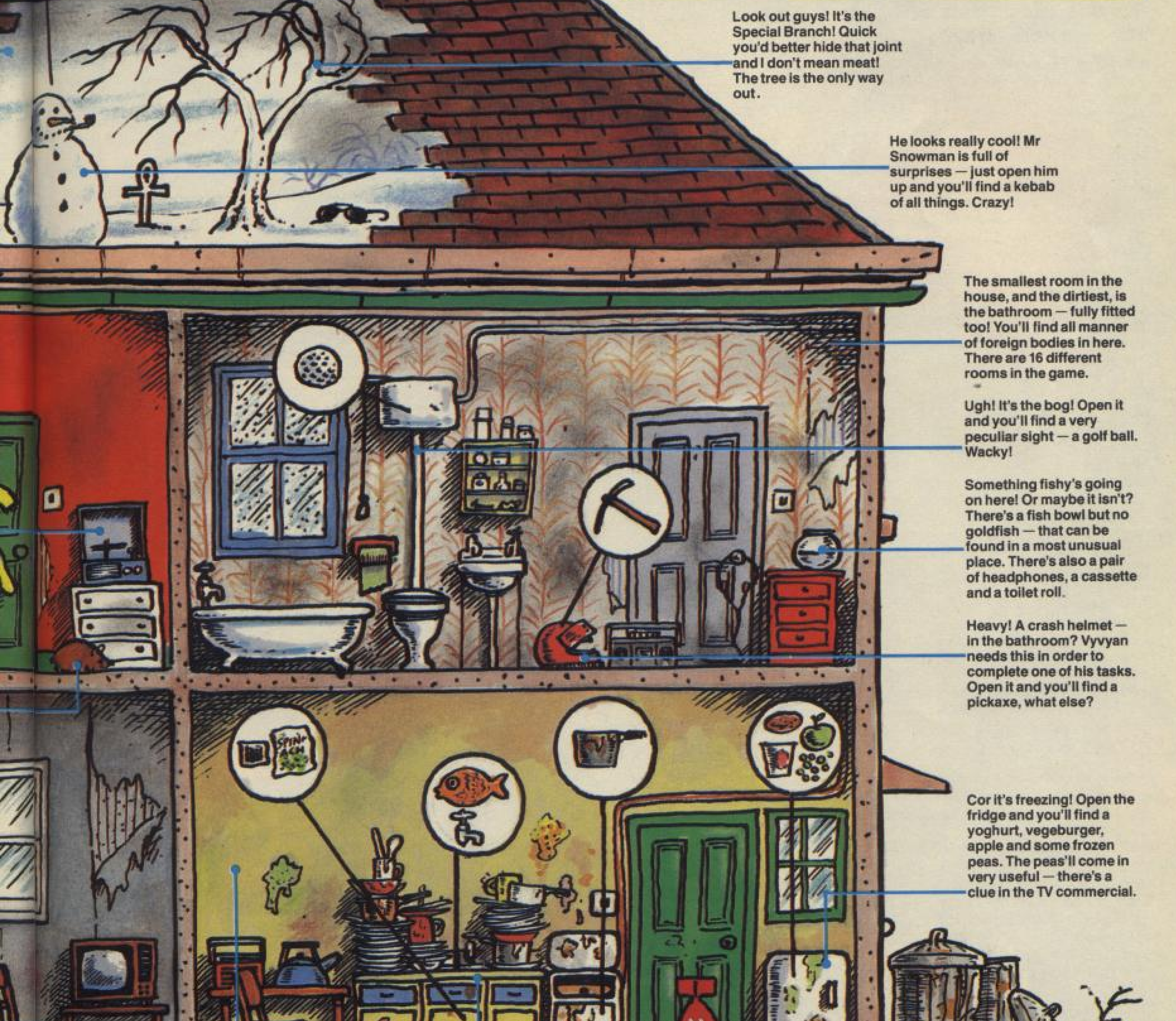
Hah! The video recorder. Berilliant — now Vyvyan can watch video nasties all day long. Really, gruesome, sick, bloody ones — yum.



Berilliant! That's my bedroom... and that's my bed. Where's the chainsaw? Great! I can smash it up into little pieces and stuff it down hippy-pant's throat. That girly-face Rick thinks he can open the washing machine. Ha. that's what he thinks!



This is Vyvyan's bedroom and the laundrette, not that The Young Ones wash their clothes. At the very top of the screen there's an icon box that'll show you what you can do to each particular object. It'll also show you where you can walk to and enable you to make your character speak.



Look out guys! It's the Special Branch! Quick you'd better hide that joint and I don't mean meat! The tree is the only way out.

He looks really cool! Mr Snowman is full of surprises — just open him up and you'll find a kebab of all things. Crazy!

The smallest room in the house, and the dirtiest, is the bathroom — fully fitted too! You'll find all manner of foreign bodies in here. There are 16 different rooms in the game.

Ugh! It's the bog! Open it and you'll find a very peculiar sight — a golf ball. Wacky!

Something fishy's going on here! Or maybe it isn't? There's a fish bowl but no goldfish — that can be found in a most unusual place. There's also a pair of headphones, a cassette and a toilet roll.

Heavy! A crash helmet — in the bathroom? Vyvyan needs this in order to complete one of his tasks. Open it and you'll find a pickaxe, what else?

Cor it's freezing! Open the fridge and you'll find a yoghurt, vegeburger, apple and some frozen peas. The peas'll come in very useful — there's a clue in the TV commercial.

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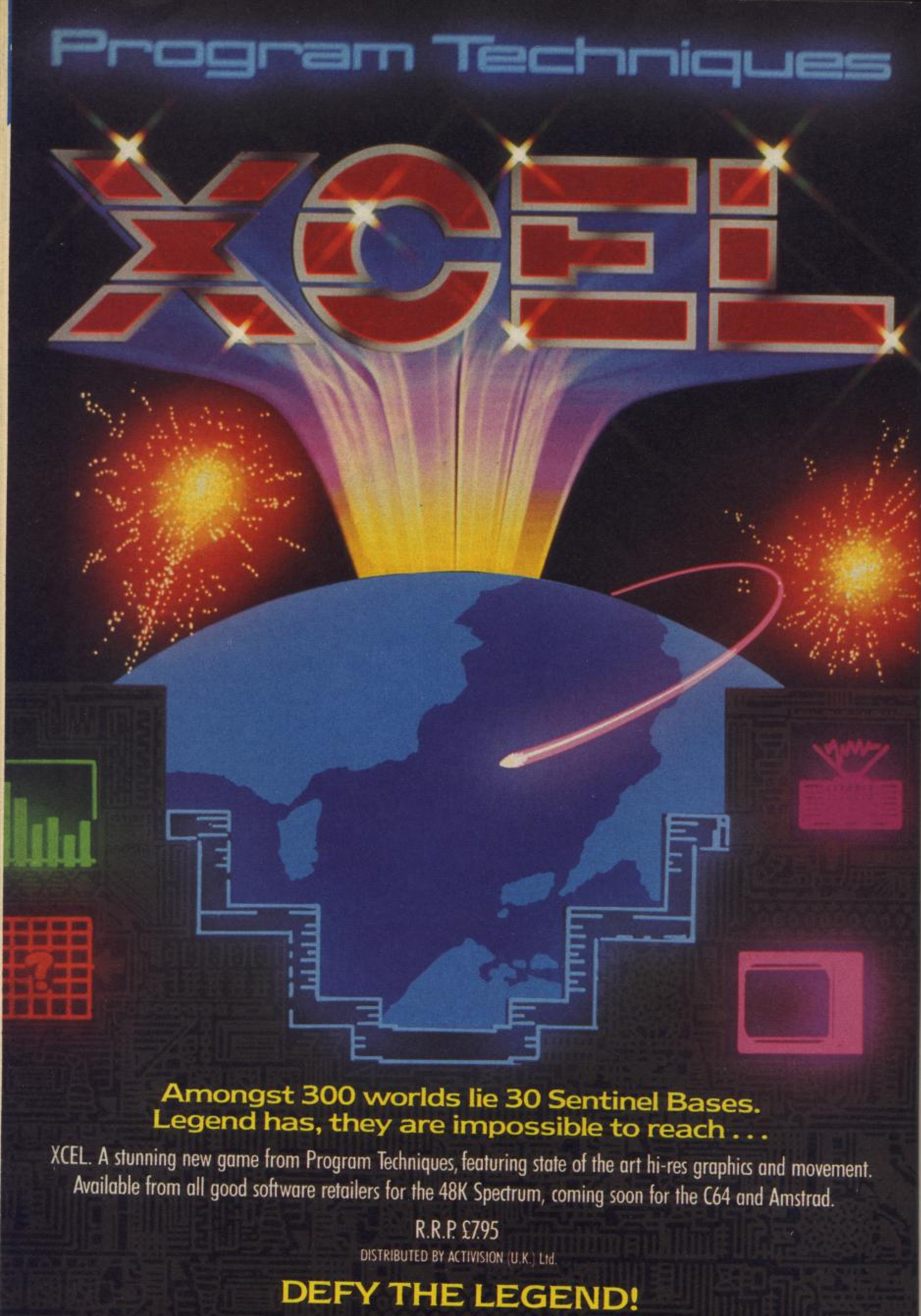
Hey, this is the room where Neil sows the seed and produces all sorts of lentil delights. You'll find a cooker, sink, fridge and cupboards — all mod cons! But just look at that washing up!

What next? You can even open the sink — heavy! Blimey, there's a tap and a goldfish inside. Berilliant!

Crikey it's a bomb! Probably one of Vyvyans — you'd better watch your step! There's a radio in the kitchen too — this might come in handy.

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TASK FORCE

Are your routines just a little too routine? Are your listings feeling listless? *Task Force*, the programmer's noticeboard, can aid your recovery.

One of the great things about *YS* readers is that you can never refuse a challenge! Last month I asked you to show off your great programming skills and *wow*!

First past the post was ***Renato Campos*** from Portugal. He's sent in a snippet that'll blow the minds of all those brainboxes who say you can't have recursive functions in Basic — that is, a function that'll calculate the factorial of any number. And what's a factorial? Well, type it in and work it out for yourself! It's only one line.

```
  10 DEF FN f(n)=n*VAL ((
"1" AND n<=1)+("FN f(n-1)
" AND n>1))+(n=0)
```

And you'll be chuffed to know that this is one in the eye for *@!* owners, 'cos their Basic can't do that! Renato also asks why DEF FN f(n)=n*((n<=1)+ VAL ("FN f(n-1)" AND n>1)) won't work. Well I don't know? Have you any ideas? Oh yes, and one last question from Renato — has anybody *ever* found a use for VAL$?

Next comes *Paul Brain* in search of a favour — does anybody have a short mc routine to do graphics dumps via Interface 1 to an Epson-type printer. So, all you other brains out there, what about it? To give you all a start, here's a short program from ***Philip Barton*** of Camberley. It'll do a hi-res screen dump to a Brother HR5 printer from Basic! I guess it'll work just as well with an Epson or Epson-compatible printer, though you find it a little bit on the slow side — so come on all you machine code freaks...

```
  10 OPEN #3;"b"
  20 LET op=22496: LET op
p=20480
  30 LET nop=20448: LET n
opp=18432
  40 LET lop=18400: LET l
opp=16384
  50 FOR a=0 TO 31
  60 LPRINT CHR$ 27;"A";C
HR$ 8;CHR$ 10
  70 LPRINT CHR$ 27;"K";C
HR$ 192;CHR$ 0
  80 LET p=op: LET pp=opp
  90 FOR b=0 TO 7
 100 FOR c=p TO pp STEP -
256
 110 LET n=PEEK c
 120 LPRINT CHR$ n;
 130 NEXT c
 140 LET p=p-32: LET pp=p
p-32
 150 NEXT b
 160 LET np=nop: LET npp=
nopp
 170 FOR b=0 TO 7
 180 FOR c=np TO npp STEP
 -256
 190 LET n=PEEK c
 200 LPRINT CHR$ n;
 210 NEXT c
 220 LET np=np-32: LET np
p=npp-32
 230 NEXT b
 240 LET lp=lop: LET lpp=
lopp
 250 FOR b=0 TO 7
 260 FOR c=p TO pp STEP -
256
 270 LET n=PEEK c
 280 LPRINT CHR$ n;
 290 NEXT c
 300 LET p=p-32: LET pp=p
p-32
 310 NEXT b
 320 LET op=op+1: LET opp
=opp+1
 330 LET nop=nop+1: LET n
opp=nopp+1
 340 LET lop=lop+1: LET l
opp=lopp+1
 350 NEXT a
 360 LPRINT CHR$ 13;CHR$
10;
 370 CLOSE #3
 380 STOP
```

Right, hands up all those who've noticed that the above program can be shortened a bit by using a GOSUB ? You haven't? Well look at lines 90 to 150; 170 to 230 and 250 to 310. The only problem is that c is initialised to different variables. If Philip had recast his program only slightly, you could have saved yourself a bit of typing. Try this.

```
  80 LET p=op: LET pp=opp
 100 GO SUB 1000
 110 LET p=nop: LET pp=no
pp
 120 GO SUB 1000
 130 LET p=lop: LET pp=lo
pp
 140 GO SUB 1000
 150 LET op=op+1: LET opp
=opp+1
 160 REM etc...
1000 FOR b=0 TO 7
1010 REM same as lines 90
-150
1060 NEXT b
1070 RETURN
```

Next comes a couple of readers with the same problem — they both want to save the whole screen. ***David Crawford*** from Edinburgh had a great idea for a way to save the whole program as mc with the screen. So here goes:

1 prepare screen and save as SCREEN$
2 load Basic prog. and add a line 9999 SAVE "name" CODE 16384,8500: GOTO n (start line no)
3 load SCREEN$ then GOTO 9999.

The only trouble is, it won't work if you have the Interface 1 connected or if the program's longer than about 1100 bytes! Why? Well 16384+8500 = 24884. And Basic starts at 23755 and that's without Interface 1. It'll also get into a tangle with Interface 1 connected, since it creates special system variables, and they would confuse an unexpanded Spectrum. Still, if the Speccy were expanded, you wouldn't need it anyway, would you?

Jim Grimwood has a similar idea. He wants to save the screen (including the bottom two lines) without getting into a tangle with the "Press any Key" message. He's written some machine code to do it.

If we combine the two ideas, we can get a piece of code that'll save a whole program to tape as machine code, including the whole of the screen without overriding the bottom two lines.

```
              ORG  40000
      START   LD   HL,LEN-START
              ADD  HL,BC
              EX   HL,DE
              LD   HL,SPARE
              LD   (HL),E
              INC  HL
              LD   (HL),D
              LD   HL,HDR-START
              ADD  HL,BC
              PUSH HL
              POP  IX
              XOR  A
              LD   DE,(ELINE)
              LD   HL,16384
              EX   HL,DE
              AND  A
              SBC  HL,DE
              EX   HL,DE
              LD   HL,(SPARE)
              LD   (HL),E
              INC  HL
              LD   (HL),D
              LD   DE,17
              CALL SAVE2
              LD   B,50
      WAIT    HALT
              DJNZ WAIT
              LD   IX,16384
              LD   A,255
              CALL SAVE2
              RET
     HDR      DEFB 3
              DEFS 10
     LEN      DEFW 00
              DEFW 16384
              DEFW 0
      ELINE   EQU  23641
      SAVE2   EQU  1218
      SPARE   EQU  23728
              END
```

I've changed Jim's program slightly so that it's totally relocatable. And now it'll save the whole Basic program including the variables. To use the machine code, type in:

```
9000 INPUT "what name ?";
f$
9010 LET mc=(code locatio
n)+58
9020 LET len=LEN f$: IF 1
>len OR len>10 THEN  PRIN
T #0;AT 1,0; FLASH 1;"Inv
alid filename - No save":
 PAUSE 0: GO TO 9000
9030 FOR a=1 TO len: POKE
 mc+a,CODE f$(a): NEXT a
9040 FOR a=a TO 10: POKE
mc+a,32: NEXT a
9050 LOAD ""SCREEN$ : PAU
SE 0
9060 RANDOMIZE USR (code
location)
9070 GO TO start of progr
am
```

As Jim says in his letter, we hope your minds are suitably boggled! If you're wondering why you save the program as if it were code. It's simple — it can't be Merged and that makes it just a bit harder to hack into.

Before you use it, position a tape with the required screen and when the border starts flashing for a Load, start the tape. Once it's loaded, the program will wait for a keypress, *without a prompt*, and as soon as a keypress is given, Save the lot — so be sure you've started the tape in Record mode before pressing a key.

***Peter Craik* from** St Andrews sent in a crafty little snippet but I found an interesting little bug in it. See if you can find it and then send me in your corrections.

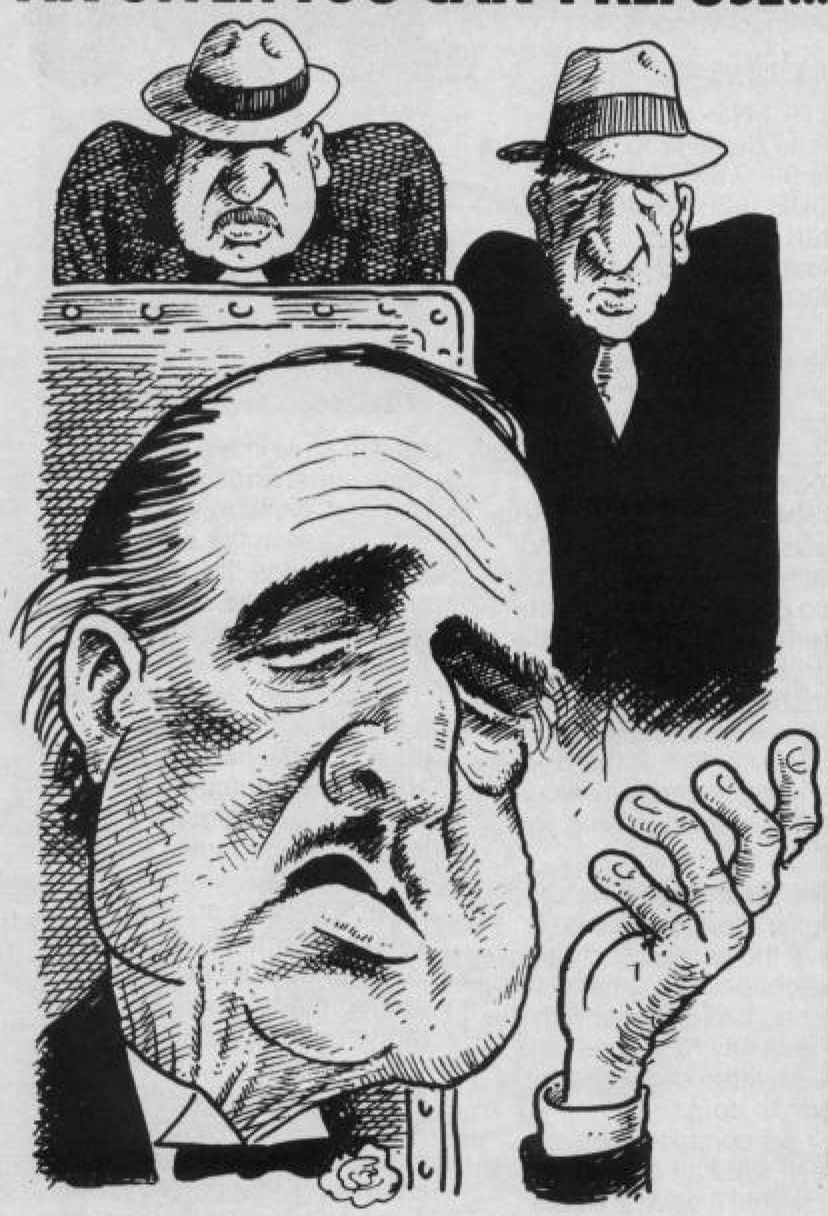
```
  10 LET ad=60160  .
  20 LET a$="The fastest
BASIC scroll around!"
  30 FOR b=1 TO LEN a$: L
ET c=ad+(b*16)-16: LET e=
CODE a$(b): LET f=15616+(
e*8)-256: FOR d=1 TO 8: P
OKE d+c-1,PEEK (f+d-1): N
EXT d
  40 NEXT b
  50 POKE 23607,(ad/256)-
1
  60 LET b$="": LET c$=""
  70 FOR a=32 TO 32+(LEN
a$*2)-1 STEP 2
  80 LET b$=b$+CHR$ a: LE
T c$=c$+CHR$ (a+1): NEXT
a
  90 LET c$=c$( TO 32)
 100 FOR a=20 TO 0 STEP -
1: REM 20=start position,
 0= finish
 110 FOR b=1 TO 8
 120 POKE 23606,b
 130 PRINT AT a,0;c$;AT a
+1,0;b$
 140 NEXT b: NEXT a
 150 POKE 23606,0: POKE 2
3607,60
```

Hmmm, a very nifty way of doing the impossible in Basic!

Now, let's see if any of you can improve on this month's routines — or add some of your own. By the way, some of the programs are still a bit long, so try and keep 'em short and interesting.

Send your programs to Ian Hoare, Task Force, *Your Sinclair*, 14 Rathbone Place, London W1P 1DE.

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BLADERUNNER COMPO

Are you a better bladerunner than Harrison Ford? You'll need a steady hand and a sharp eye if you're to spot all the robots in the picture and win one of the great prizes on offer from CRL.



I pulled up my Spinner at the diner. The name's Shovel. Sam Shovel. Private dick and amateur bladerunner. I took a draught of root beer. All night now I'd wandered the city sidewalks in search of a Master Set. Then I could build my own robot, complete with four motors. Worth a hundred bucks of anybody's money. But I'd had no luck — I'd just have to win it in the *YS* compo based on CRL's new game *Bladerunner*. I might even walk off with one of the thirty copies of the game on offer to the runners-up.

All I had to do was be a bladerunner — right up my street. I'd just take a look at the picture and identify how many different robots are tucked away in it — not just the whole ones 'cos they're a piece of cake but also the sneaky devils that try to disguise themselves. You can have a go too — put a ring round each robot you spot then clip the page and send it to Bladerunner Compo, *Your Sinclair*, 14 Rathbone Place, London W1P 1DE. There are plenty of prizes for everyone — just so long as I take off with the main one, mind. I'll show that Harrison Ford!

Now was that a replidroid mugging that little old lady? I took another bite of pastrami. Hell fire, a bladerunner's never off duty, I raised my mega-magnum. "Make my day droid." "Aren't you in the wrong film?" it squealed. But I still blew it away. Hell, no one likes a smartass. And dead droids tell no tales.

Replidroid Rules OK

Entries must reach us by February the...em...ur...thirty days has September..er, ah...yes — the 28th.
All entries must include the number of droids you've spotted ringed on the piccy and that number should be on the back of the envelope.
The Ed won't enter into any correspondence about the competition. Robots can't write!

I've spotted .... droids in the piccy and anyway I'm a lot hunkier than Harrison Ford.

Name..

Address..

....

....Postcode................................

Now cut the page (or a photocopy) and send it to the Bladerunner Compo, *Your Sinclair*, 14 Rathbone Place, London W1P 1DE. And remember to write the number of robots on the back of the envelope.


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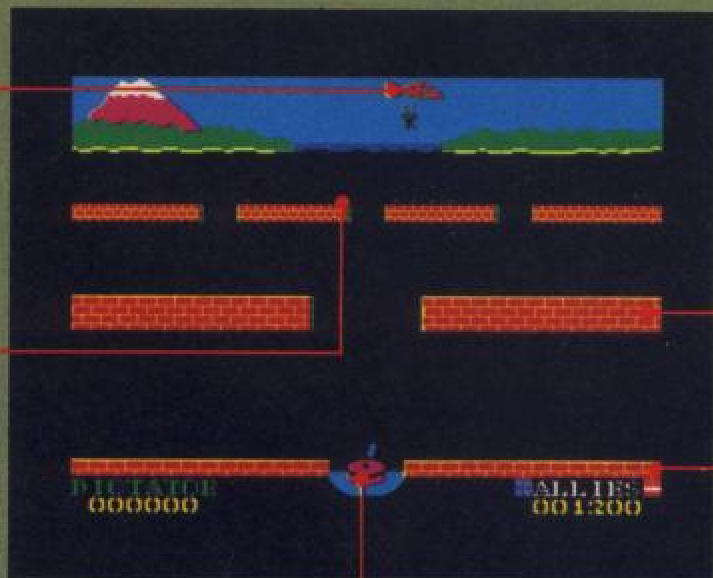
YOUR SINCLAIR MEGAGAME

BEACH

ATTACK



Okay you guys, go get 'em — hit 'em fast, hit 'em hard and give 'em hell. And for chrissakes, don't muss your hair up — CBS T.V. is here.



Fly high and your men wil be vulnerable — too low and their chutes won't open — or you might be fated to a forced landing. Press fire to drop your men — and change direction to confuse the machine gunner.

Once your men are established, watch for the lights — when they're on you can make a dash for it from here. You can only choose your direction — once sprinting you can't change your mind — so don't run into the rain of death.

Having got to this wall your men will either go round it directly — they can hurl grenades and manoeuvre but they're also very vulnerable — or scramble over the flanks. Most of these soldiers will make it to safety, but they can't attack the gun. Now select your strategy . . .

Each soldier you land scores 200 points, each one to the second wall 2000, and if you make it to the last wall, notch up another 1,000. Blowing up the pill box gains you 4000 — but at what cost to your own men? Dare you take the risk?

The pill box — mum always said to keep away from these! Just one gun, but it's not the soft underbelly of the dictator's defences. When on the enemy side it rotates and elevates automatically.

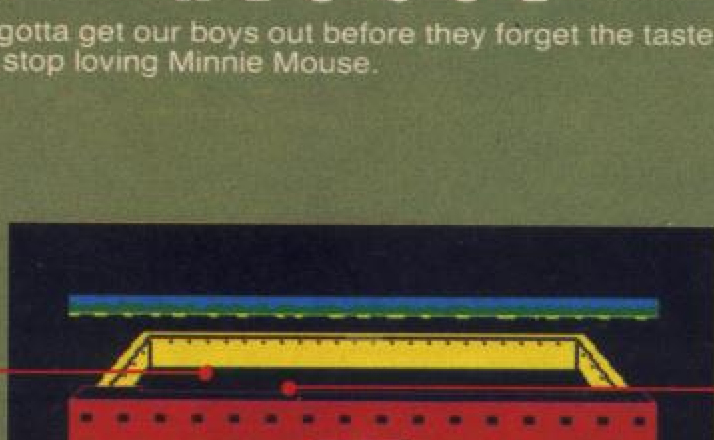


Eh, cara mia and caramba — why don't these gringos leave me alone to chew my cheroot and cause chaos in the cosmos!

RESCUE



We gotta get our boys out before they forget the taste of Budweiser and stop loving Minnie Mouse.



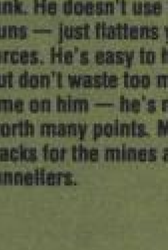
Unfortunately the fortress takes up a big chunk of screen. Looks pretty but it's really a waste of space — just like watching Arsenal, everything takes place on one half of the pitch!

Your men, nine of 'em, have to be rescued but presumably they're blindfolded, and deaf as they can only walk in a straight line across the screen. It's your job to blast away the obstacles — tanks, tunnellers and mines.

This little bloke whizzes along the ramparts and drops things on you. If that's not enough of a headache manholes and mines appear beneath your feet — unless that covering fire is hot, hot, hot!

Nothing subtle about this tank. He doesn't use his guns — just flattens your forces. He's easy to hit, but don't waste too much time on him — he's not worth many points. Make tracks for the mines and tunnellers.

The extra line doesn't tell you who's winning the Superbowl. But it does let you know how many of your good buddies have made it to the other side. Can you make it to the next screen?



Santa Maria, Ardiles and Villa — will they never forget the Alamo?

US Gold came with the classic, *Beach Head*, saw it was a winner and now it's set to conquer the world with *Beach Head II*. *Rick Robson* rallies his reinforcements and prepares to fight . . .

he evil Dictator from *Beach Head* is back again — but this time there's not a beach in sight. Even if he can't kick sand in the faces of the weak and defenceless it'll take all your Stallone skills to overcome him in his new jungle setting.

This final battle takes place over four screens. First you must parachute your troops behind enemy lines from a helicopter. Just take care to avoid the raking fire of the dictator's pill box. Desperately your men take cover behind the first rampart. Mustering your forces you make a dash for the second wall. Beleaguered by the blitz of lead you must then combine bravery with brains, guts with guile. Some of your men will act as decoys, others will make futile suicide dashes, a brave few will succeed in bombing the machine gun only to die in the rapid rattle of lead.

But once under your command, you can turn the pill box against the dictator's jungle fortress. Use it to give covering fire against tanks,

FAX BOX

Game	*Beach Head II*
Publisher	US Gold
Price	£7.95
Joystick	Kempston/Sinclair/Protek
Keys	Define your own

HEAD II

AR
ADS

land mines, tunnellers and even masonry dropped from the fortifications. In this way you can rescue your long-imprisoned comrades.

And now it's time to pursue the fleeing forces of evil. Back in your whirring attack chopper you hug the contours of the jungle escarpment, evading the natural hazards and missing the missiles. Success in this phase will take you to the end.

And as in all great battles — Vader vs Obi-wan Kenobi, Holmes vs Moriarty, Border vs Botham — the climax is a head to head, an eyeball to eyeball confrontation, just you and the dictator, glaring across a cavernous gulch, your only weapons knives, your wits and your will to win . . . between you the raging torrent roars, soon to claim its victim, you . . . or the dictator.

Of course if there's a touch of evil within you, there's no reason why you can't be the dictator. You can even use the game's fine one-to-one facility for a duel to the death.

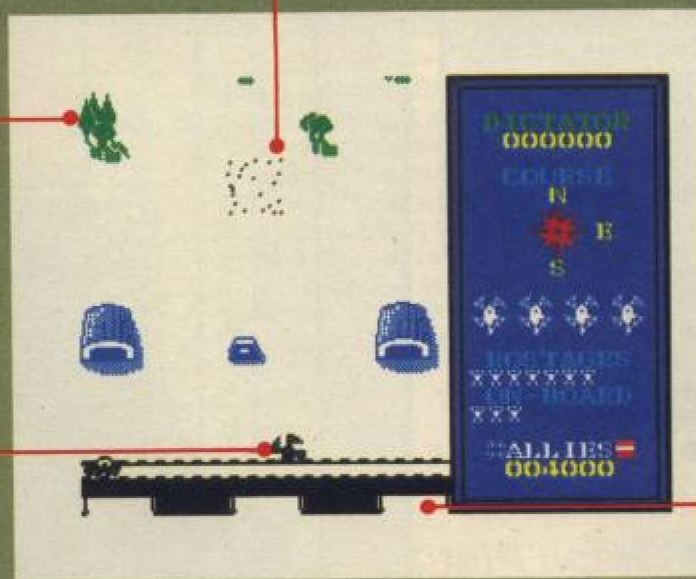
Technically it's hard to find fault with a game forged as formidably as any of US Gold's armoury. I found the final screen a bit wet (in more ways than one) after the furious hardware of the previous screens. But if you've got this far on all three levels of difficulty maybe you need the rest. And perhaps the fairly average graphics don't quite match up to the game play. But now I'm splitting hairs where most people'll just want to get in there and start splitting heads.

Graphics
Playability
Value for Money
Addictiveness
9

BATTLE



Remember, no */!%*/ won a war by laying down his life for his country but by killing the */&$?% on the other side.



Scattered over the jungle are various hazards. Radio towers need smashing, hangars harassing, cars pranging. But don't get too carried away — tree top landings are not advised!!

The screen scrolls convincingly but with no radar, terror comes literally out of the blue. But there's still time to evade the dictator's missiles and fire off a few of your own.

The bridge is a major obstacle. Do your *Airwolf* aerobatics and fly through the arches for maximum effect. It's not exactly *Cyclone* but you could get blown away with this phase of the action.

Don't let your chopper cop it! Your aim is threefold. Stay alive, blast the dictator's installations and get those hostages abroad.



You crazeeee Anglo-Saxons — what's with this Day of Death? All zap, zap, Zapata! Jus' jump in your Fiesta an' come over for tequila an' a siesta.

ESCAPE



Well, it's just you and me, kid. This screen ain't big enough for the two of us, and the only way out is down.



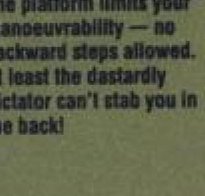
Graphics are more Alpine than Andes. They make a pretty backdrop though, as you struggle not to drop back into the gulch of death.

What's this? Antipodean archery! They look like boomerangs but they never come back. And nor will you — 'cos if you're hit enough times it's a real pain in the neck — and then it's the early bath for you!

Your man has movement along the platform. He can also duck and leap his opponent's weapons. At the 'easy' level this is a doddle — but it's a touch of the old hot shoe shuffle on the hard stage.

The platform limits your manoeuvrability — no backward steps allowed. At least the dastardly dictator can't stab you in the back!

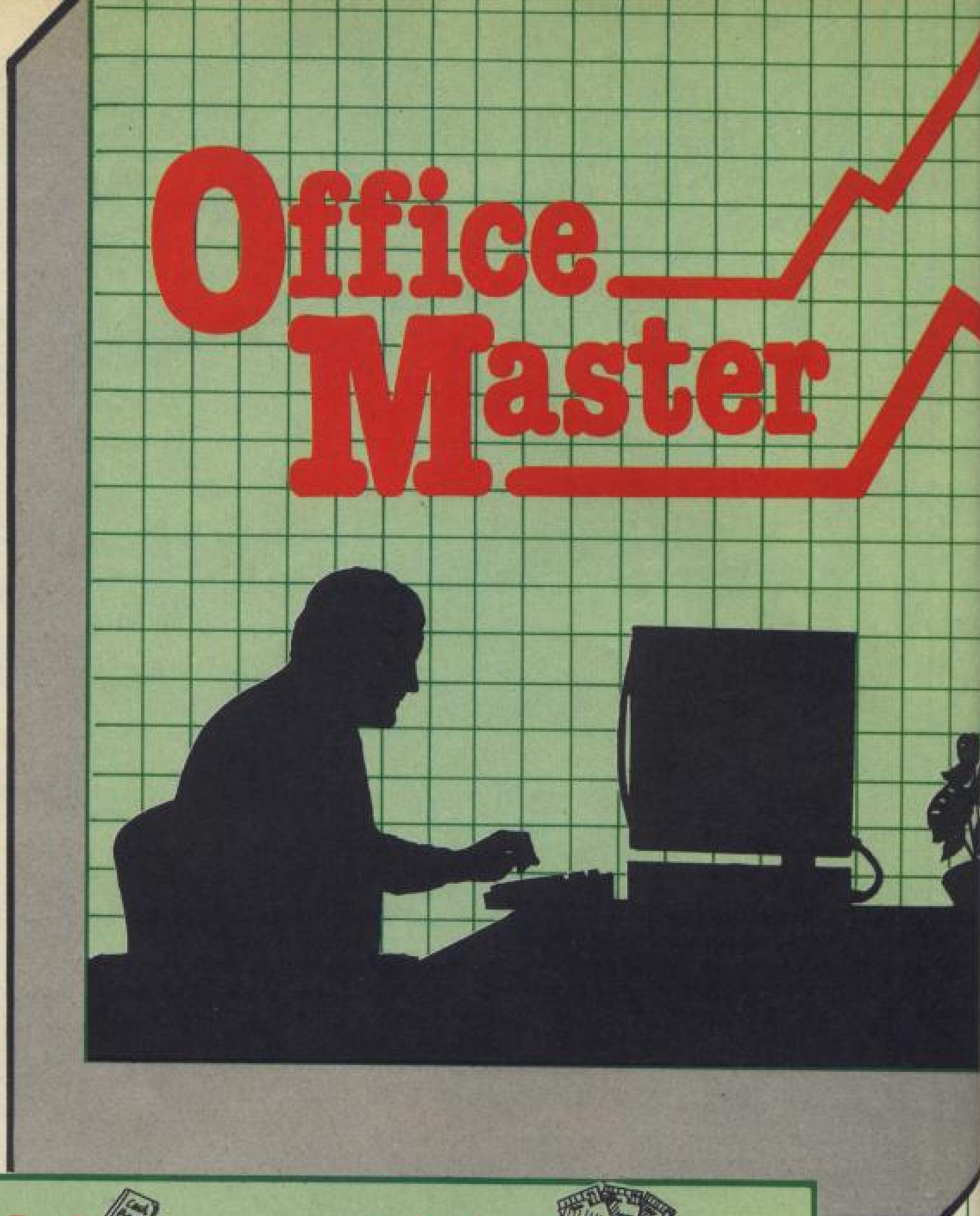
The two score boxes let you know whether you're winning the battle but losing the war. Each hit is notched up here but the important thing is to win most of the five rounds.



You teenk you can catch Sancho with his Panza down? You must teenk I'm Caracas.

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Using the data file on microdrive or cassette prepared by the cash book program, this software will produce comprehensive end-of-year reports ready for audit by your professional adviser. The Gemini cash book and final accounts system is now in use by many thousands of businesses and as a 'classic' professional program has been translated for a wide variety of micros. Cash-book and final accounts alone warrant the purchase of this OFFICE MASTER program pack.

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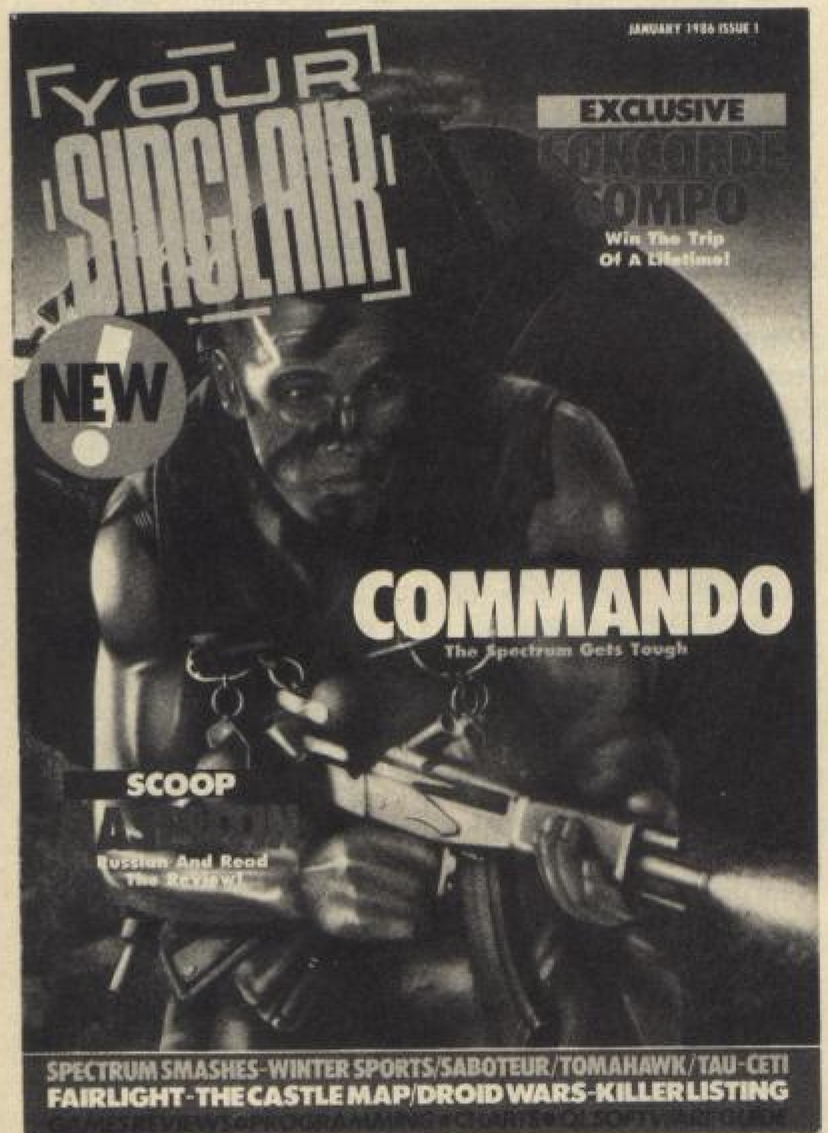
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HACKING AWAY

More joke POKEs and hack cracks from the man with the POKEst, *Chris Wood.*

Okay, so you're bulging with Christmas pud, turkey and trifle and don't feel like moving. Well, get out your Speccy and those new games you got for Chrissy 'cos they're dying for a POKE and you need a bit of mental exercise too.

HALL OF THINGS

This little routine for *Hall Of Things* has been around for quite a while. Andy attempted to publish it in *Your Spectrum* 17 but failed and I must confess I took a little while to get around to it. Still, **Bruce Phipps** from Chadbury sent in the routiine again so here it is:

```
  10 LOAD ""CODE 61263
  20 FOR X=61441 TO 61454
: POKE X,0: NEXT X
  30 POKE 61440,201: POKE
 61650,249
  40 POKE 61724,27: POKE
61725,241
  50 POKE 61549,64: POKE
61550,148
  60 RANDOMIZE USR 61441
  70 FOR X=61440 TO 61451
: READ Z: POKE X,A: NEXT
X
  80 DATA 17,0,96,33,64,1
56,1,0,64,237,176,201
  90 RANDOMIZE USR 61440
```

After you've finished this, POKE 32717,0 for no wounds or infinite energy or you can POKE 35923 with your starting magic. RANDOMIZE USR 24567 will start the game.

MANIC MINER

Ooops! Even the greatest make mistakes and I'm afraid there's one in *Your Spectrum* 20. **Maxwell Clark** sent in a revised POKE for confusing the aliens in Bug Byte's *Manic Miner*, accusing me of getting the original wrong. Well, that certainly confused me 'cos when I looked out his letter I found it was all his fault. The POKE should've been:

POKE 65132,0

Sigh at least it shows who's still the greatest. On with the POKEs...

NODES OF YESOD

Yes, I know it's knocking on a bit but the programmers did include a message '*YS* keep out' in the loading sequence, so how could I resist? Well, we did it, so there! **Pete Smith** of Burton, **Phil Nosirnayme** from Hartlepool and **Lee Bathgate** from Fife all sent in routines and here's the one I chose entirely at random:

```
  10 LET S=30000: LET N=2
1: GO SUB 20: RANDOMIZE U
SR 30000
  15 LET S=63218: LET N=7
: GO SUB 20: RANDOMIZE US
R 63201
  20 FOR X=S TO S+N-1: RE
AD Y: POKE X,Y: NEXT X: R
ETURN
  30 DATA 17,17,0,175,205
,60,117,17,250,2,62,255,2
21,33
  40 DATA 188,244,55,205,
86,5,201,175,50,149,127,1
95,0,226
```

WAY OF THE EXPLODING FIST

Lee Griffiths from Merseyside sent in this snippet of a program to give you 255 time units instead of 30 in *The Way Of The Exploding Fist:*

```
  10 LOAD ""SCREEN$ : LOA
D ""CODE : POKE 44793,255
: RANDOMIZE USR 39982
```

Funny but my copy has a RAND USR address of 34816. Could there be as many different versions of this as there are of *Starion*?

PUD PUD

Yes it's a game and not a Christmas left-over — or at least according to **Andrew Jones** from Cheshire and just to prove it he's sent in a POKE for infinite Pud-Puds — POKE 49287,0. Andrew reckons he's a fifteen year old geriatric — is hacking bad for your health? Cough, cough!

ABU SIMBEL PROFANATION

Unos trios paranoias di Portugalos! Well, three blokes from Spain namely **Fausto Carvalho, Luis Pereira** and **Carlos Vieira** who've sent in a few POKEs for *Abu Simbel Profanation.*

POKE 49290,x where x=' to 255

POKE 47684,0 for eternal madness and boiling nerves

POKE 45877,201 to transform objects

POKE 47656,0 to transform yourself

What you transform yourself or the objects into is anybody's guess but those who've played the game should know.

ALIEN 8

Robert Brown from Gloucester has been having a few problems with my *Alien 8* program *Your Spectrum* 14. Well, as far as I know there's only one version of this game on the market so it's possible you could've made two errors in the DATA that cancelled each other out. That way the checksum could've missed them — for example, 24,35,6 instead of 6,24,35. I have found that the program only loads one out of five times and it can be cured by adjusting the volume.

Finally, if you finally got *Sprite High, Your Spectrum* 19, to work you may still find problems. I really am sorry. I forgot to mention that you should load the main SPRITE CODE before anything else when you're testing your sprite movement etc. This is because the first 14 bytes of the SPRITE CODE contain data for a dummy sprite which will overwrite your first one. You could resave it with:

SAVE "SPR CODE" CODE 57270+14, 584-14.

Persevere and the results will be worth it...

AD ASTRA

Another mega-hack from a lady keep 'em coming girls! This one's from **Mrs J Brown** from Cheshire for *Ad Astra*:

POKE 29907,0: POKE 29908,0: POKE 29909,0: alters the formation of the aliens

POKE 28591,0: POKE 28592,0: POKE 28593,0: gives you better fire power

POKE 28793,0: POKE 28794,0: POKE 28795,0: ships that need multiple hits will now only need one

POKE 380847,0: POKE 30848,0: POKE 30849,0: one ship comes across the screen instead of four

POKE 35852,0: POKE 35853,0: POKE 35854,0: infinite lives

To get all these in simply type:

CLEAR 24000:LOAD "A" CODE: LOAD "B" CODE



Kipper Williams' cartoon is taken from his new book *Warning! This Computer Bytes*. It'll be published by Blandford Press on March 24th, price £1.95.

Type in the POKEs you want and then RANDOMIZE USR 3,3000 to start the game.

EVERYONE'S A WALLY

Still having mega problems with *Everyone's A Wally*? You must have infinite endurance already! There's a POKE to make all the characters stand still so they don't nick all the objects you want.

As if that wasn't enough you can change to another character even when it's not on the same screen. Don't type in any data lines you don't want:

```
 100 CLEAR 29999: MERGE "
": POKE PEEK 23627+256*PE
EK 23628+33,33
 110 FOR z=65313 TO 1E9:
READ X: IF X<999 THEN  PO
KE Z,X: NEXT Z
 120 GO TO 0
 130 DATA 24,2,0,199,205,
128,91
 140 DATA 62,201,50,67,22
7: REM INDESTRUCTABLE
 150 DATA 62,24,50,184,23
1: REM CHANGE TO ANY CHAR
ACTER ANYWHERE
 160 DATA 62,201,50,44,16
9: REM STOP OTHER CHARACT
ERS MOVING
 170 DATA 195,151,91,999:
 REM DATA END MARKER. IMP
ORTANT.
```

These few POKEs are from a person who comes from the 'Wolbidoob', Lancashire. Hmmm. Merge in the loader and enter these POKEs before the USR call

POKE 28982,0: POKE 28983,0: POKE 28984,0

and continue loading. A small tip for budding hackers, if you're NOPing out a call routine, a RET at the actual call address saves on the typing and is neater.

GYROSCOPE

Are you going potty playing *Gyroscope*, the Speccy version of *Marble Madness*? Well just enter this as a direct command:

CLEAR 24063: LOAD ""SCREEN

and load it in. Then all you've gotta do is enter the POKEs you feel like. POKE 53922,0 for infinite lives, POKE 54033,201 to roam around the screen at will and POKE 54354,201 to walk through the wobbling nasties getting in your way.

If you're really feeling lazy you can use one POKE that does all three features and that is POKE 53887,201. When you manage to finish all the screens the surprise is ... ta dah... you can travel up the slopes instead of down them, wow! Oh an' a useless bit of info — the two voice sound routine in this game is the same as in *Fairlight*.

MICRODRIVIN'

Hey, is your microdrive making you miserable? Drop Andrew Pennell a line and he'll sort out your problems. Now we're motoring!

Hi, it's me. Yeah me, Andy. S'pose you've forgotton me 'cos I wasn't in last issue. Rather large oversight by the Ed. *(Me? Ed)* Anyway now I'm here let's kick off with a big thanks to all those who wrote in about the corrected version of the routine that allows you to see which Interface 1 ROM you have. Oops, sorry I know it was a corrected version but we (*You! Ed*) made another blunder. Line 40 should have read:

40 IF a=129 THEN LET z=1

Most of you who wrote said that PRINT z gave the result of 129 so you've all got version 1 of the ROM. One reader, however, got 128! Well, I'll look into that and give you more details next month.

And now on with all your problems — oh, I do so enjoy playing at agony aunt.

I'm having a bit of bother with my Epson printer and Interface 1. Have you found the cure yet?
Christopher Birkett, Solway

Yup! I have, thanks to **Hugh Wilding** who told me that Epson knows all about the problem and, better still, the cure. First set the Spectrum and Epson to 4800 baud (not 9600). You'll then have to get your soldering irons out and add a couple of components to the Interface 1 plug to get rid of all those glitches that cock up the printer. Connect a 1K, ¼ watt resistor between pin 3 on the I/F 1 plug and the cable going to it. Next, connect a 2000pF capacitor between the cable end of the resistor and pin 7 on the plug. Easy innit?

I've got a Brother HR5 that's Epson compatible. How can I use its features via the Interface 1?
John Taylor, Grantham

Right, for straight text output OPEN #3,"T", then LPRINT, LLIST will work on the printer. In order to use the special features you'll have to send control codes, and you can only do this with a "B" type channel that can be created with a line like OPEN #4,"B". Then PRINT #4 statements for the extra features.

If you wanted to go into condensed mode, for example, you'd use PRINT #4, CHR$(15);. More advanced features require Escape codes which use the ESC character. In the manual setting the perforation skip is described as ESC N‹x›, so, to set it to ten lines you'd use the following command:

PRINT #4; CHR$(27); "N";CHR$(10);

Another tip — it's useful to have both B and T type channels open simultaneously, B for control codes and T for text.

What's all this about a dec/hex converter in my Interface 1 ROM?
Paul Daamen, Netherlands

In version 1 of Interface 1 there were some subroutines for printing blocks of memory in hex that were used by the authors to debug it. When the Interface was finished they were left in and there they remained until version 2 came along. The hex routines were removed 'cos room was rather tight. You learn something new every day.

Several disk drive interfaces claim 'Microdrive compatibility' but many items of software that make similar claims don't run on them — why's that?
David Saint, London

The disk interfaces are usually compatible in the sense that they use the same syntax from Basic to use the extra features but the problems occur because from machine code none of them is compatible. Machine code software has two ways of calling the Interface 1 ROM — via hook codes and directly. As yet there is no interface that has compatible hook codes and it would be impractical for one to have the same actual subroutines.

What's my problem? Well, I've got a Kempston Interface E but I can't load array data files from microdrive, though I can save them. Masterfile is the worst as I can't save anything to it.
R Dearden, Harlow

I don't have one of those interfaces but I think I know what the problem is. What a megabrain, eh? It has a ROM which is mapped out in the low 16K of the Basic ROM. It's also mapped out when the shadow ROM is in place but it normally doesn't obstruct it. Judging by the symptoms it appears that it's mapping into the Load array routine in the microdrive ROM that's obviously causing big trouble. Try contacting the guys at Kempston and see if they've got any ideas. If that brings no joy try using a different version of the Interface 1 ROM. Good Luck!

How can I easily produce the error 'Hook code error' from the Interface 1?
Keith Symonds, Essex

I can't think why you'd want to do that but each to their own I s'pose. Do an RST 8 followed by a byte from #33 (ROM1) or #34 (ROMs 2&3) to #FE inclusive. It produces the error because those byte values are neither Basic error messages or valid hook code calls.

I've used the copier program supplied with the Expansion System to great effect but whatever I do I cannot get it to copy the games cartridge supplied with it. Why is this?
Paul Daamen, Netherlands

Ahah! The reason is quite simple. When I wrote Copier, I was asked to write a protection routine so that the games cartridge couldn't be ripped off. Cartridges that have been duplicated using this special routine can't be copied with the official program, though other copiers will back them up with no problems. Copying should only be used for backing up and not to reproduce original software as this is illegal!


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YS ADVENTURES

Heave a scythe of relief - the Grim Reaper's here to offer help in all your adventures. drop him a line at Death's Door, YS Adventures, 14 Rathbone Place, London W1P

Death speaking! Seems that a few of you mere mortals reckon you've overcome my deadly hand and have actually managed to complete some adventures. The worst offender is **John 'El Supremo' (till proved otherwise) Wilson** who claims he's finished more adventures than anybody else. "Yet another adventure has fallen foul to my ruthless adventuring... *Robin of Sherwood.* Just so you wouldn't feel left out this month here are some megatips for all you namby pambies who can't complete it.

"To escape the dungeon you've gotta first have a look at the grating, talk to the prisoners, stand on their shoulders and examine the grating again. Wait until you hear footsteps above you and then grab the ankle, choke the guard, examine him, take his sword and examine the grating yet again. Then you've got to slide the bolt, open the grating and go to the door. Easy ain't it?

"I've got even more hints, there are a few general tips: go via Marion's bedroom window when escaping from the castle. You can try 'Go Bed' in any room and you'll be told 'No time for sleeping' except of course Marion's room where you're told 'Not allowed'. Some people are no fun!"

Even better! A poor soul who's come to a dead end and will hopefully come to an even deadlier one. **Nuno Miranda** from Portugal has been playing *Fairlight* by The Edge although he's having a few problems. "What do you do with the crown? I tried to put it on the throne but nothing happened. How do you open the southeast gate in the courtyard? In the dungeons there's something strange on the floor but I don't know what to do with it, the killer plants are giving me a few headaches too.

"Please, please, please help me or else I'll go mad!"

Well, I'm not so sure I should help you really — I am Death! Okay just this once. You must be wearing the crown in order to enter the tomb. As for the strange thing on the dungeon floor I think that's a red herring. No more hints from me as I'm feeling a bit tired, a bit like death warmed up really!

But if you need any more help have a look at the list of people offering hints and if you reckon you've got a few tips pass them on to the people who need them. And the fight is on to tell that John 'El Supremo' Wilson a thing or two. **Mark Thomas** from Plymouth reckons John Wilson wrote to him for help! Things are looking good — maybe you're gonna be the new 'El Supremo' Mark? A certain **James Elliott** reckons he is the 'El Supremo', just take a look at the Kings Of The Castle.

Stop sitting around, send those cries for help and claims to fame to Death Sentence, *Your Sinclair,* 14 Rathbone Place, London W1P 1DE.

KINGS OF THE CASTLE...

Mountains Of Ket, Temple Of Vran, The Hobbit, Inca Curse, Ship Of Doom, Espionage Island, Urban Upstart, Lords Of Midnight, Hampstead and more. Nuno Miranda, Av. Emidio Navarro, 19-A, 1 2750 Cascais, Portugal.

Robin Of Sherwood and a load more. John 'El Supremo' Wilson, 26 Spotland Tops, Cutgate, Rochdale, Lancashire OL12 7WX.

Stop The Express, Oracles Cave, The Hobbit, Atic Atac and *Sabre Wulf.* Alan Saunders, 8 Marybell, Sedbergh, Cumbria LA10 5AR.

Dungeon Adventure, Red Moon, Planet Of Death, Ship Of Doom, Ground Zero, Erik The Viking, Sherlock, Temple Of Vran, Denis, Emerald Isle and more. Mark Thomas, 47 Elford Cresent, Colebrook, Plymouth, Devon PL7 4BT.

Robin Of Sherwood, The Hulk, Spiderman, Heroes Of Karn, Valkyrie 17, Mountains Of Ket, System 15000 and more. James 'El Supremo' Elliott, 266 Carseview, Tullibody, Alloa FK10 2SU.

ON THEIR DEATH BEDS...

Espionage Island — How can I move the rock to enter the mine shaft or drive the tipper truck? *Manor Of Doom* — How do you get the motorbike started? T Barnard, 44 Blackdown, Hilltop, Stony "Stratford, Milton Keynes.

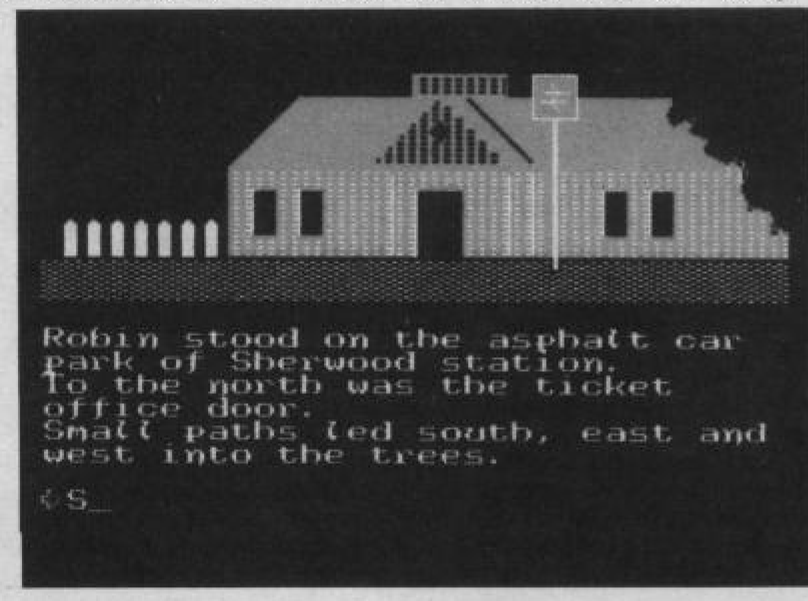
The Ship Of Doom — How do you pick up the key once you've shot the glass cover in the key room? R Shepherd, 64 Rickards Avenue, Knoxfield, Victoria, Australia 3180.

The Fourth Protocol — Any help you've got. B Buck, 12 College Close, Portslade, Sussex BN4 2WT.

Hampstead — When I get to Waterloo, why is my best course of action to board the train back to northwest London? Marc Holliday, 7 Holland Road, Stamford, Pequisa.

Tir Na Nog — How do you get in doors with letters written on them and where are the four things? Harry Lynn, 11 Hillhead Crescent, Belfast, Northern Ireland BT11 9FS.

Valhalla — Help! Danial George, 2 Braeside Gardens, Acomb, York YO2 4E2.



ROBIN OF SHERLOCK
Silversoft/£7.95

Thou art Robin of Sherlock in yon Sherwood Forest — there thou shalt find a dead Doctor Watson, a pot of vaseline and Maid Marian's clothes! Go forth and solve the many mysteries that have brought chaos to this realm.

Yessir, it's a cracker! Well written, with some very neat touches (considering it was written with the Quill), excellent graphics, and a tremendous sense of humour. Authors Jester and Desperado have come up with a brilliantly funny game that extracts the Michael out of both Sherlock and Robin of Sherwood.

Here in Sherwood Forest you'll find your merry men, Maid Marian (who's always ready for a quick cuddle), Friar Gorbachetnik (who eats so much he explodes), and the Yellow Brick Road to the Emerald City of Huddersfield. And if that's not enough for you, there's even a Kentucky Fried Squirrel take-away, a railway station, and a portable phone. And it comes with brill sound — when did you last hear your Speccy chugging into a station.

As well as a dead Doctor Watson, the Smurphs are up to something dirty, and there's a hideous conspiracy involving candles and vaseline! There's also a hideous bug. Typing GO WINDOW — or BREAK WINDOW for that matter, get's the message SWEAR NOT followed by a system reset.

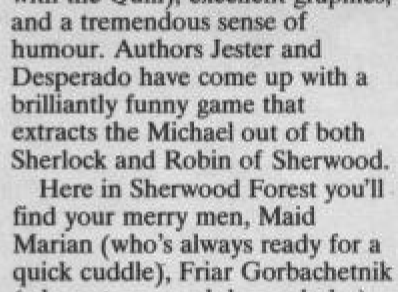
Robin of Sherlock's a hoot if you want something different. You can talk to the characters (unusual for a Quilled game), listen to them talking amongst themselves, and do a RAMsave if things look tricky. Go for it, and avoid the fried squirrels at all costs.

Atmosphere	■■■■■■■■□□	7
Ingenuity	■■■■■■■□□□	
Size Factor	■■■■■■□□□□	
Value for Money	■■■■■■■□□□	

MINDSHADOW
Activision /£7.99

What a graphics adventure! Great pics, great puzzles — something for everyone!

The program is in two parts, Mind 1 and Mind 2. Mind you, you can only play the second part if you've completed the first. And that's not easy. It all starts on a desert island. It's idyllic except for the fact that you haven't the faintest idea who you are, where you are, and what the hell you're doing there.



Still, you're helped by an excellent program. Although the location descriptions are quite short, the detailed large-scale graphics do wonders for creating atmosphere. You'll soon be off and sailing the seas, visiting other islands until you make it to the mainland.

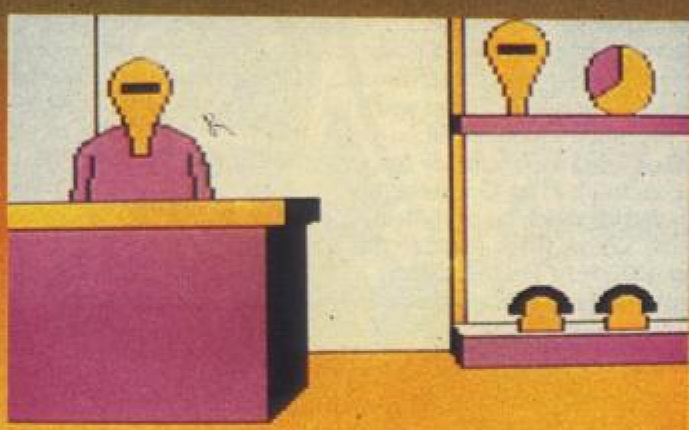
To help you work out what's happening, there's an unusual command — THINK. Use it at the right time and in the right place and it'll drop you hints as to what's going on. And as the game progresses you'll stumble across further clues — thinking about them will also reveal a little more.

As a bonus for novices, there's a special Tutorial file on the tape. This'll give you an excellent training in adventuring, making it an enjoyable splash-out for first-timers. Experienced adventurers may find the game limited in its locations, but even so the puzzles are fairly tricky.

Atmosphere	■■■■■■■■□□	7
Ingenuity	■■■■■■■□□□	
Size Factor	■■■■■■■□□□	
Value for Money	■■■■■■■□□□	



Yes come to Enoch, the capital of Eden. Level 9 Tour[s] offering 200 colourful locations packed full of fun, night-li[fe] and wild surprises and if you don't believe it just take a loo[k] at the brochure.



DESTINATION

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You arrive in Eden, with the special Trans-Ident Soul-Swop facility, in the body of a typical Eden dweller who's drinking in the pleasure of Reveline's Dream Parlour — dreamy eh? Well not everything's as dreamy as Eden isn't always a paradise.

Throw away your Eden-English, English-Eden pocket dictionary for a start. These guys aren't Neanderthals — they speak a rather simplified standard Galactic English. Your Speccy Bio-Trans facility features a thousand word vocabulary that'll give you more rabbit than a well-known Enoch supermarket chain.

If you fancy a visit to one of Enoch's emporiums you'll need the standard currency unit — the Cred. Sorry but American Express Inter-Galactic Traveller's cheques won't do nicely here. Prices are a bit higher than on Earth but a good thing's worth paying that bit extra for.

Here are some of Eden's heavenly prices:

Reveline's Dream Parlour	9 creds
Pleasure Dome Entrance	9 creds
Newspaper	free
Museum	free
Casino	1 cred
Pie	9 creds

In fact all's fine in Eden, 'cept of course, the fines. You may be offered a few things on the streets for free. That's 'cos they're illegal.

Yeah, it *is* the other way round on Earth. Fines, like the Space Patrol Group, can be heavy but don't worry there's always a way to recoup your losses in Eden.

Fines

For being in debt	50 creds
Possession of an illegal object	9 creds
Theft	500 creds

MONEY

A wealth of health

Many travellers fear the unknown. Will I be able to drink the water? Do I need vaccines? Relax! The inhabitants of Eden have discovered the secret of almost eternal life — thanks to the transplant of worn-out bodily organs.

So if you fancy a fling in the Pleasure Dome or you want to buy a pet (or pay a fine!) it could cost you an arm and a leg — literally! A limb'll bring in about 800 creds cash-in-hand — that's if you've got a hand to hold it in! Enoch Hospital, south of City Square will do a quick clean job, cut price!

EAST OF EDEN

Level 9's new adventure The Worm In Paradise is set on the far-distant planet of Eden. But all is not well in the Garden. Join Death as he takes you on the trip of a lifetime — or rather several lifetimes. Nothing is impossible in Paradise...

PEOPLE

See the natives in their local habitat!

Eden's inhabitants are a friendly bunch. Many of them are robots who're going about their daily lives oblivious of the curious tourists around them — yes you! Fuzbots, the local constabulary, are on hand to keep you out of trouble. But if you do get up to naughties — buying illegal items, shoplifting, insolvency — the gates of Eden's gaol won't close on you, you'll only be fined.



ROUND AND ABOUT IN EDEN

No great big red double decker turbo buses here — just the smooth sophistication of the pedway that connects each city district. Earthling's find it all a bit disorienting as the roundabouts are numerous and they all look the same! And with forty million colour-coded destinations don't blame it on us if you end up off the beaten pedway. The Michelin guides are a bit thin here so your best bet is to draw yourself a map. If all else fails Level 9 Tours can provide you with a simple program that'll enable you to get where you're going.

STREET CRED

Part of our bumper package is a set of Trad-Clads — well we don't want you arrested for indecency do we? — and 100 creds. We also supply you with a personal designer tattoo, a device that'll tell you the time and also keep a check on your finances. Every Eden hour it'll buzz — like those quaint 20th Century ones that used to go off all over the cinema when the film was just getting to a good bit. Should you succumb to the magic of Eden then you could have a spaceman's holiday — and do a job of work. But don't forget that you must be properly registered.

FAX BOX

Game	The Worm In Paradise
Publisher	Level 9
Price	£9.95

TOURS

Sites and sounds

Frankly, you start at the Pleasure Dome. If you really want some fun you can throw crap in the Casino, muse in the museums and visit the pet shop. It'll cost you, but for a holiday like this it's worth going out on a limb even if you're left without a leg to stand on.



THE MUSEUM

See the inflatable Kim Kimberley, complete with bowl of lentil porridge! Keep your hands off her, or you won't keep your hands on! Remember here on Eden they can remove organs other planets can't reach.



The Casino

Great fun this! Just select a colour and pull the arm of the One-Armed-Bandit, watch his eyes light up and your credit balance drop! It's a scream and you might even win some money — there's a twenty cred jackpot waiting for some lucky tourist.

Reveline's Dream Dome

Just the thing for the weary travellers! Enter your choice of chamber, don the visor, and enjoy a brief but invigorating sleep with a special pre-programmed nightmare! Eeeekkk!

The City Plaza

A tribute to modern civil engineering, this is one location every tourist should have on his or her list. You should also visit the Municipal Buildings and the Monument on Glory Road. And when you're ready to go further afield, try the Eden Transport System.

MACLONE

There's a bandwagon doing the rounds at the moment that everyone's hitching a ride on — and it's called the Apple Macintosh. You only have to take a look at SofTechnics' *The Writer*, reviewed in last month's *YS*, or OCP's *Art Studio*, reviewed in this, to see the influence it's having — all those drop-down menus and icons. Now just so you don't feel left out in the code, I've written my own Mac influenced program.

Maclone is a collection of three pull-down utility programs that are related to the Desk Accessories on the Mac — perhaps you've seen the calculator, puzzle and scrapbook that can be pulled down over the top of the screen you're working on. My three programs are similarly transparent to the Speccy so the screen won't be permanently corrupted. That means, for example, if you're bored with the program you're working on, you can call up one of these utilities and it'll sit on top of your program until you're ready to get going again.

CLONE RANGER

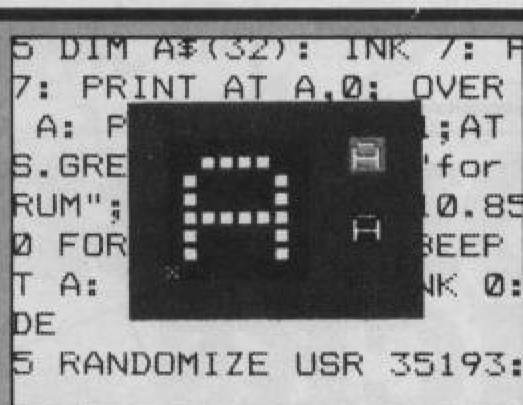
As soon as you're ready to use your saved copy of *Maclone*, type CLEAR 61950: LOAD "Maclone" CODE and start the tape. There are three main RAND USR calls to *Maclone* — 63256 sets the program up, 63278 switches it off and 63269 turns it back on again. You'll only need to set up *Maclone* after you've loaded it in or after NEW.

Nope, it's not the latest fast food fry-up from McDonalds — though that's how we sold the idea to Tony 'Slim' Samuels! Maclone's an amazing utility package that packs the power of the Macintosh into your Speccy.



THE LETTER SQUARE

Imagine you're writing a program and inspiration has deserted you. You've made enough cups of coffee to keep Brazil in credit for the next ten years but still nothing'll come. Nope, there's nowt for it but drop everything and play a game — if only you weren't already using the Speccy. Well, now, at the press of a key, you can jiggle your brains with this letter square puzzle. Just use the keys Q,A,O and P to move the blank tile around the letter square. As on as you get bored or inspiration returns, just press Space and bingo, you're back into Basic.



THE UDG EDITOR

Here's a real time-saver — well, you can make up all the time you've wasted playing the word square. It's a UDG editor that you can call up and use from within the Basic program you're writing. It lets you change any one of the Speccy's 21 UDGs just by moving the cursor round the UDG with the Q,A,O and P keys. You can flip it on or off with the M key and change a UDG using Enter. Once back in Basic (press Space), your UDGs'll appear just as you defined them in the *Maclone* routine. Save your data before you shut down with SAVE "udg data" CODE USR "a".21*8.



THE LOCK-UP

Phew, that megaprogram's nearly finished but you've just got to go out/sleep/eat/go for a pee. And what happens — Sod's law, that's what! Someone's dusted and well, my hand slipped, honest. Sorry just doesn't seem to say enough. Plus you've got to keep a constant vigil against all those industrial spies just waiting to rip off your programmig. Panic no more 'cos this program provides the answer. Select option 3 and the screen will go black with just six question marks in the centre of the screen. Now type in your six letter password — no repeats are allowed so if your name's Aardvaark, you'll have to find an alternative. When all six are in, press Enter and a message appears on the screen that should deter all intruders — DON'T TOUCH. Even if someone has a go, they'll find the Speccy completely locked up — and it'll stay that way without the password. Clever eh?

When you're ready to begin again, type in your password to take you back to Basic — But if you get it wrong you'll have to go right back to the beginning.

MAC MIMICRY

Here's a run-down of the three Macalike programs that mimic the desk accessories. Two grand computers — who needs 'em?

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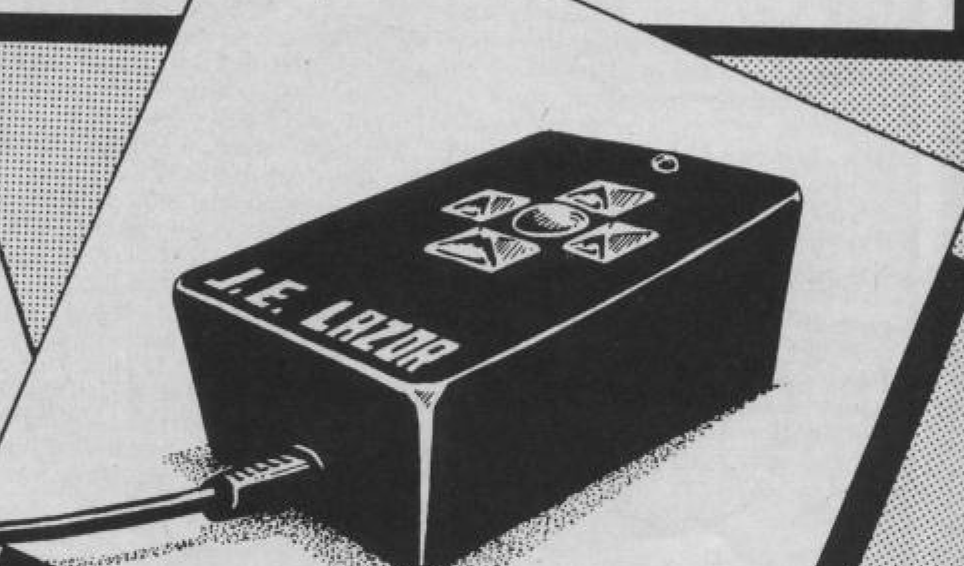
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18th ZX MICROFAIR

Please include a stamped, self-addressed envelope and make cheques/POs payable to ZX MICROFAIR.

The Hex Loader

Is it a bird? Is it a plane? Nope, it's a Hex loader. Use it to type in the Hex data below.

```
  10 CLEAR 32768
  15 LET cqsf=110
  20 LET sl=62451
  40 LET A=10: LET B=11: LET C=1
2: LET D=13: LET E=14: LET F=15
  50 LET CQ=0
  60 LET T=0
  98 LET nue=0
 100 INPUT H$
 101 IF h$="END" OR h$="end" THE
N  GO TO 300
 105 IF LEN H$<>2 THEN  GO TO 10
0
 110 LET H=0
 120 LET H=H+16*VAL H$(1)
 130 LET H=H+VAL H$(2)
 140 POKE SL,H: LET SL=SL+1
 145 LET CQ=CQ+H
 150 PRINT TAB (T);H$;: LET T=T+
3: IF T=33 THEN  LET T=0: PRINT
 155 LET nue=nue+1: IF nue=cqsf
THEN  GO TO 200
 160 GO TO 100
 200 INPUT "CHECKSUM >";CS
 210 IF CS<>CQ THEN  PRINT : PRI
NT "DATA ENTRY ERROR": LET sl=sl
-cqsf: GO TO 230
 220 PRINT : PRINT "DATA OKAY"
 230 LET t=0: PRINT : LET nue=0:
 LET cq=0: GO TO 100
 300 PRINT "ALL DATA ENTERED": S
TOP
```

The Hex Data

Type in the code one byte at a time and enter the checksum after each block. When it's all in, type END 'cos that's where you are. Now you've got 1980 bytes of machine code just sitting there in high memory — better save it using SAVE "Maclone" CODE 62451,1980. So, are you clonesome tonight?

```
F5 C5 D5 E5 DD E5 CD 05 F4 DD E1
E1 D1 C1 F1 C3 38 00 3A 00 00 FE
F3 C0 3E 7F DB FE E6 03 FE 00 C0
21 60 09 22 B2 F4 2A B2 F4 11 05
00 CD B5 03 F3 2A B2 F4 2B 22 B2
F4 3E 02 BC CA 14 F4 CD 8E 02 F3
7B FE 0C CA 31 FB FE 24 CA 4D F4
FE 1C CA D2 F7 FE 14 CA C4 F9 C3
1A F4 CD AF F6 21 05 05 22 7F F5
22 81 F5 21 B4 F3 22 54 F7 11 91
CHECKSUM >15923

F4 06 09 CD 9A F7 06 05 C5 78 C6
08 32 9E F4 06 08 11 9D F4 CD 9A
F7 C1 10 EE 06 08 11 A7 F4 CD 9A
F7 21 EC F4 11 05 F5 01 19 00 ED
B0 C3 1C F6 10 06 16 08 0C 21 23
23 23 23 23 24 16 00 0C 23 20 20
20 20 20 23 16 0E 0C 25 23 23 23
23 23 26 FF 00 00 00 00 00 00 00
00 00 00 00 03 0F 1F 3F 3F 7F 7F
00 00 00 00 00 00 00 00 FF FF FF
CHECKSUM >8391

FF FF FF FF FF 00 C0 F0 F8 FC FC
FE FE 7F 7F 3F 3F 1F 0F 03 00 FE
FE FC FC F8 F0 C0 00 41 42 43 44
45 46 47 48 49 4A 4B 4C 4D 4E 4F
50 51 52 53 54 55 56 57 58 20 00
00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00
00 00 16 09 0D 11 1E F5 06 01 CD
9A F7 C9 16 00 0D 06 01 11 2A F5
CD 9A F7 C9 CD 21 F5 21 00 3C 22
CHECKSUM >9869

54 F7 21 05 F5 06 05 C5 3E 0F 90
32 2B F5 06 05 3E 20 BE CA 77 F5
CB 46 CA 6F F5 3E 3A 32 58 F7 7E
E5 C5 CD 5A F7 C1 E1 23 10 E5 CD
2D F5 C1 10 D6 C9 3E 17 32 58 F7
C3 5D F5 3E 00 32 58 F7 C3 5D F5
05 05 05 05 00 3A 83 F5 FE 03 C2
99 F5 3A 7F F5 FE 01 C8 3D 32 81
F5 C3 C7 F5 FE 02 C2 AB F5 3A 7F
F5 FE 05 C8 3C 32 81 F5 C3 C7 F5
CHECKSUM >14662

FE 01 C2 BD F5 3A 80 F5 FE 01 C8
3D 32 82 F5 C3 C7 F5 3A 82 F5 FE
05 C8 3C 32 82 F5 2A 81 F5 CD F0
F5 7E F5 E5 2A 7F F5 CD F0 F5 EB
E1 36 20 F1 12 2A 81 F5 22 7F F5
CD 36 F5 21 D0 07 11 04 00 CD B5
03 F3 C9 2D 7D CB 27 CB 27 85 25
84 26 00 6F 11 05 F5 19 C9 00 06
FF C5 ED 5F 6F 3A 78 5C E6 3F 67
25 7E E6 03 32 83 F5 CD 84 F5 C1
CHECKSUM >15076

10 E9 C9 CD 36 F5 CD 8E 02 F3 7B
FE FF CA 1F F6 CD 02 F6 C3 85 F6
CD 8E 02 F3 7B 21 B1 F4 BE CA 2C
F6 32 B1 F4 FE 25 C2 4E F6 3E 03
32 83 F5 CD 84 F5 C3 2C F6 FE 26
C2 5E F6 3E 02 32 83 F5 CD 84 F5
C3 2C F6 FE 1A C2 6E F6 3E 01 32
83 F5 CD 84 F5 C3 2C F6 FE 22 C2
7D F6 AF 32 83 F5 CD 84 F5 C3 2C
F6 FE 20 C2 2C F6 C3 BD F9 06 19
CHECKSUM >17097

11 EC F4 21 05 F5 1A BE 20 1B 23
13 10 F8 06 64 21 D0 07 11 03 00
ED 52 C5 E5 CD B5 03 F3 E1 C1 10
F1 C3 82 F6 C3 2F F6 21 0C 48 06
38 11 4A FB C5 E5 01 08 00 ED B0
E1 CD 09 F7 C1 10 F2 21 0C 59 06
07 C5 01 08 00 ED B0 01 18 00 09
C1 10 F3 C9 11 0C 48 06 38 21 4A
FB C5 D5 01 08 00 ED B0 D1 CD 03
F7 C1 10 F2 11 0C 59 06 07 C5 01
CHECKSUM >11614

08 00 ED B0 01 18 00 EB 09 EB C1
10 F1 C9 EB CD 09 F7 EB C9 24 3E
07 A4 C0 7D C6 20 6F D8 7C D6 08
67 C9 21 00 F2 11 01 F2 01 00 01
36 F3 ED B0 F3 3E F2 ED 47 ED 5E
FB C9 F3 ED 56 FB C9 60 69 22 52
F7 78 E6 18 67 CB F4 0F 0F 0F F6
58 57 78 E6 07 0F 0F 0F 81 6F 5F
1A 22 56 F7 C9 00 00 00 3C 00 40
30 00 6F 26 00 29 29 29 ED 5B 54
CHECKSUM >12545

F7 19 ED 5B 56 F7 06 08 7E 12 23
14 10 FA 7A 0F 0F 0F 3D E6 03 F6
58 57 2A 58 F7 1A AD A4 AD 12 21
53 F7 34 CB 6E 28 04 CB AE 2B 34
21 56 F7 34 C0 23 7E C6 08 77 C9
E5 C5 1A FE 20 DA AD F7 D5 CD 5A
F7 D1 13 C1 10 F0 E1 C9 FE 16 CA
BA F7 FE 10 CA C9 F7 C3 A8 F7 13
EB 46 23 4E 23 EB D5 CD 33 F7 D1
C3 A8 F7 13 1A 13 32 58 F7 C3 A8
CHECKSUM >14495

F7 CD AF F6 C3 41 F8 C5 CD AA 22
47 04 3E 01 0F 10 FD AE 77 C1 C9
3E FF 32 8C F8 18 05 3E 00 32 8C
F8 D5 CB 22 CB 22 CB 23 CB 23 3E
68 83 5F 3E 49 82 57 3A 8C F8 FE
FF CA 24 F8 06 03 C5 D5 C1 CD D8
F7 0C CD D8 F7 0C CD D8 F7 0D 0D
14 C1 10 EC D1 C9 D5 C1 CD D8 F7
0C 04 CD D8 F7 0C 04 CD D8 F7 0D
0D CD D8 F7 0C 0C 05 05 CD D8 F7
CHECKSUM >15107

D1 C9 06 06 C5 3E 07 80 32 59 F8
06 0A 11 58 F8 CD 9A F7 C1 10 EE
C3 BC F8 16 0D 0C 10 00 20 20 20
20 20 20 20 20 11 00 00 2A 8A F8
06 08 C5 7E E5 06 08 C5 A7 CB 07
F5 DC EE F7 F1 1C C1 10 F3 E1 2B
14 7B D6 08 5F C1 10 E4 C9 00 00
00 00 00 00 00 00 16 09 0D 10 0F
20 20 20 20 16 0A 0D 20 20 20 20
16 0B 0D 20 20 20 20 16 0C 0D 20
CHECKSUM >8840

20 20 20 16 09 12 10 17 41 16 0B
12 10 0F 41 3E 00 32 8F F8 21 00
00 22 8D F8 2A 7B 5C 3A 8F F8 CB
27 CB 27 CB 27 C6 07 06 00 4F 09
22 8A F8 22 90 F8 11 92 F8 06 18
3A 8F F8 C6 41 32 B5 F8 CD 9A F7
CD 65 F8 2A 7B 5C 25 22 54 F7 11
B6 F8 06 03 3A 8F F8 C6 20 32 BB
F8 CD 9A F7 21 00 3C 22 54 F7 06
02 C5 ED 5B 8D F8 CD E7 F7 21 88
CHECKSUM >11841

13 2B 7C B5 20 FB C1 10 ED CD 8E
02 3A B1 F4 BB 28 C5 7B 32 B1 F4
FE 21 20 10 3A 8F F8 3C FE 15 20
02 3E 00 32 8F F8 C3 C1 F8 FE 10
20 17 ED 5B 8D F8 CD EE F7 3E 01
43 04 04 1F 10 FD 2A 90 F8 AE 77
C3 F2 F8 FE 20 CA BD F9 FE 25 C2
7D F9 3A 8E F8 3C FE 08 CA F2 F8
32 8E F8 21 90 F8 35 C3 F2 F8 FE
26 C2 95 F9 3A 8E F8 3D FE FF CA
CHECKSUM >15770

F2 F8 32 8E F8 21 90 F8 34 C3 F2
F8 FE 1A C2 A9 F9 3A 8D F8 3D FE
FF CA F2 F8 32 8D F8 C3 F2 F8 FE
22 C2 F2 F8 3A 8D F8 3C FE 08 CA
F2 F8 32 8D F8 C3 F2 F8 CD 31 FB
CD D8 F6 C9 21 00 58 11 4A FB 01
00 03 ED B0 3E FF 32 B1 F4 21 30
75 2B 7C B5 C2 D7 F9 06 08 21 6D
48 C5 01 06 00 ED B0 01 FA 00 09
C1 10 F3 CD 22 FA C3 D9 FA 21 4A
CHECKSUM >16434

FB 11 00 58 01 00 03 ED B0 11 6D
48 06 08 C5 01 06 00 ED B0 01 FA
00 EB 09 EB C1 10 F1 3A 48 5C CB
2F CB 2F CB 2F E6 07 D3 FE C9 21
00 58 36 00 11 01 58 01 FF 02 ED
B0 3E 00 D3 FE C9 06 14 C5 06 08
1A 13 C5 CB 27 30 01 71 23 C1 10
F6 C1 10 EE C9 1C 61 26 70 12 91
A9 20 12 91 69 20 12 91 29 20 1C
61 26 20 1C C9 32 48 09 29 4A 48
CHECKSUM >10275

09 29 43 C8 09 29 4A 40 08 C6 32
48 21 61 58 11 49 FA 0E 36 CD 34
FA 21 A0 59 11 5D FA 0E 2D CD 34
FA C9 42 48 59 36 35 54 47 56 4E
4A 55 37 34 52 46 43 4D 4B 49 38
33 45 44 58 FF 4C 4F 39 32 57 53
5A FF FF 50 30 31 51 41 FF 16 0B
0D 10 3A 00 00 00 00 00 00 CD 8E
02 3E FF BB CA BB FA 16 00 21 B8
FA 19 7E FE FF CA BB FA 21 B1 F4
CHECKSUM >10741

BE CA BB FA 77 C9 21 B5 FA 11 B6
FA 01 05 00 36 3F ED B0 11 B0 FA
06 08 CD 9A F7 06 06 21 B5 FA C5
E5 CD BB FA E1 77 23 E5 11 B0 FA
06 08 CD 9A F7 E1 C1 10 EB CD 8E
02 7B FE 21 C2 08 FB CD 22 FA CD
71 FA 06 06 21 B5 FA C5 E5 CD BB
FA E1 BE C1 C2 17 FB 23 10 F2 CD
31 FB CD F5 F9 C9 21 64 00 E5 21
D0 07 11 64 00 CD B5 03 F3 E1 E5
CHECKSUM >15945

F3 E1 23 3E 6E BC 20 F7 C9 00 00
00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00
CHECKSUM >1343
```



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HARD FACTS

Having hard times with your hardware? Write to *Steve Adams* and he'll give you a good time!

I've got a Kempston Centronics E printer interface and would like to produce a full width screen dump and get rid of all the blank lines between the text.
Lawrence Owen, Brighton

Well, you can get rid of those nasty blank lines by using the CR (carriage return) setting on the printer, it's probably on LF (line feed) at the moment. Andrew Pennell's article *Dumps Of Distinction, Your Spectrum 4*, should help you with the full width problem.

When I connect up my Spectrum Plus, Currah MicroSpeech, ZX printer and Currah MicroSlot nothing works, though they work individually. Why?
D. Piper, Blackwater

Sounds to me that you're experiencing what we in the trade call a power supply problem. Your best bet is to clean the contacts at the back of the ZX Spectrum and the MicroSlot.

I can't load *Hyper Sports* or *Daley Thompson's Decathlon* on my Spectrum version 2 although they load on my friend's Spectrum version 3. It's driving me potty.
Simon Rabbell, Lancashire.

The games you mention use hyperload routines and the number that's read from the keyboard port is different on the version 3 Spectrum. Unfortunately the programmers haven't considered old users! There's only one answer — take the offending software back to the shop and ask for your money back.

Where can I buy the add-ons mentioned in *Bits And Pieces, Your Spectrum* 18?
R Reed, Somerset

Most of the peripherals in *Bits And Pieces* cannot be purchased through retailers but you should be able to get them on mail order from the firms that supply them.

I recently moved to Canada and would like to use my Spectrum with a Canadian telly.
Marco Nogueira, Canada.

Well, if the system used is NTSC, 525 lines your Spectrum will need a new VHF modulator and a different ULA to change the line frequency to 60HZ, 525 lines. I reckon you ought to get a second hand monitor or TV that works to British Standards (PAL,625 lines, 50HZ). I don't think Sinclair will Americanise it.

Do you know of any 300 Baud terminal program that I can use for my Interface 1's port.
Jean-Pierre Gibbard, Yaraville, Australia.

As a matter of fact I do! Paul Griffiths, (13 Andrews Road, Gospel Oak, Tipton, West Midlands DY4 0AW) has a version for text only transfer and a Dutch company called Microsource (Postbus 1243, 8001 BE Zwolle, Netherlands) sell a Prestel type program for the Interface 1. Drop 'em a line for details.

I'm a keen songwriter and want to use my Spectrum as a programmable synthesiser. Can you give me some advice on what equipment and software to use?
Paul Allen, Liverpool

Sure can do! The MIDI interface would be the best as it'll allow you to interface many different synths and use the Spectrum to record and playback the sounds generated from the keyboard. You can control more than one synth so it'll be a good investment. You'll have to get software to suit the interface so you'd be well advised to look at combinations that'll suit your requirements.

My Spectrum works fine with a colour TV when connected up with a Currah MicroSpeech but it won't work properly with a Sony 124UB black and white TV. Why am I getting all this interference?
Glynne McDonald, Dunbartonshire, Scotland

It sounds to me that the black and white TV should go in for a service. I reckon the sound and video signals are too close to each other causing the 'sound on vision' type of interference you describe.

Help! My poor Speccy is very sick indeed. It only produces black and white pictures. How can I get the colour back?
J Beaton, Inverness

It you've got an issue 1 or 2 Spectrum then there's no problem — they've got a small capacitor inside that can be twiddled to adjust the colour. However, if you've got an issue 3 it could be anything in the colour circuit so it'd be best to get it looked at by a good repair firm.

How do you connect a Trend Printer 800 to a Spectrum?
F Newberry, Portslade

Easy! You'll have to buy an Interface 1 and RS232 lead. Connect pins 5, 6 and 8 together inside the plug to make sure it works.

I know this sounds crazy but I'd like to turn an Ingersol XK696 data recorder into a tape recorder. Can it be done?
J Robinson, Romford, Essex.

Well, you can try! The Load control can be used as a playback volume control but you'll need a separate pre-amplifier to plug into the AUX input. That way you can get the tone and volume you'll need to work from a MIC input. There's already an AC erase and AC bias for recording on the unit so you shouldn't have any difficulties there. Have a look in the Maplins or AMBIT catalogue for the kit.

I have a problem. The trouble is I never know when to stop piling on the interfaces on my faithful ol' Speccy. I've already got five peripherals stacked on the back. Will I be pushing my luck if I add an RGB monitor interface?
Graham Woodcott, Dorchester

I recommend you get an upgraded power supply and a MicroSlot interface as well 'cos all the RGB interfaces are dead-ended. Both Adapt Electronics and Ferguson do ones that are both pretty popular.

If I acquired an Interface 1, a microdriver and disk drive interface, such as OPUS or Kempston, that use microdrive commands, would I be able to transfer tapes to disk?
R Grattan, Retford, Nottinghamshire

It's not very sensible to use two devices that use the same commands for a start. The Kempston interface (KDOS) would be the best bet 'cos it doesn't use the same microdrive commands — they're all prefixed by PRINT #4. It also uses a command that'll allow you to transfer tapes to disk without needing another interface.

How do I connect up a Spectrum Plus, microdrive and VTX5000?
Malcolm Rose, Lytham, Lancs

Well, the Spectrum's connected to the Interface 1, the Interface 1's connected to the VTX5000 and the VTX5000 can then sit vertically behind the Interface 1 and that's the word of the Lord.

I've got a solution to the dot crawl problem you get with a Spectrum and monitor. Put a switch in series with the colour tuning capacitor (version 1 and 2's only). To eradicate dot crawl simply turn it off! This removes the colour and gives a perfect black and white signal to the monitor.
T Van de Wart, Holland

Nice to see a tip for a change, thanks T. If anybody else has got a few hardware hints send 'em along to me at *Hard Facts*

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■ Hi Hak and Leigh. I love you Leigh. Happy hacking Hak and I hope your Speccy cools down for Christmas. How's Mark, Tina? Bye for now, love from Joe. Mark Harris, Flat 4, Freshford Mansions, Atlantic Road South, Weston-Super-Mare, Avon.
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BACKLASH

Iolo Davidson — On the Other Hand . . .

The financial crisis at Sinclair Research must have been dire indeed for Sir to have publicly stated that he thought Robert Maxwell would be better than himself at running the business side of the company. And just to get the egotistical magnate to front up a few readies. (We can't be sued for revealing that Maxwell is an egotist, can we?)

According to the *Sunday Times*, the Mirror Group's heading for a twenty-five million pound loss this year, after an unprecedented drop in circulation on all three of its national newspapers. Perhaps this is the reason that the Sinclair/Maxwell deal fell through. Maxwell may have suddenly realised that he didn't have ten million to spare. Or Sinclair may have realised that Maxwell didn't have ten million to spare. Sir is not, after all, as hopeless at business as he sometimes makes out — even if he does hang round with that Mensa crowd!

It's become almost obligatory for journalists to snipe at Sinclair. Even the television people seem to have changed over from 'entrepreneurial genius' to 'unsold stocks of C5s'. I predict that this means the badmouthing phase is now over. Once the telly gets hold of something it's dead as a story, and we visionaries in the specialist press have to write articles that go 'On the other hand . . .' I mean, you don't want me to tell you the same rubbish you hear every night on the box, do you? So we'll just lose likeable Uncle Clive the bumbling inventor, and in his place find Sir Clive 'Fifty Pence on the Pound' Sinclair, close-mouthed tycoon.

When you think about it, Sir Clive's most successful innovations haven't been the genuinely new technology, such as the folded cathode ray tube in the miniature flat telly, but the hard-headed businesslike cost cutters like the membrane keyboard. Hands up everyone who actually likes the Spectrum (or QL) keyboard. Gosh, what a strange looking hand! Of course you were never meant to like the keyboard, you were meant to like the price, and millions of you did.

Sir didn't invent the home computer, but he did manufacture the first one that everyone could afford. The membrance keyboard and the ULA are the things that made the hundred quid computer possible, and they were available to any manufacturer. But Sinclair was the quickest to see the business possibilities of what were essentially compromises rather than technical advances.

The general public had no reason to notice Sir Clive until the advent of the home computer boom, but he's been around for a very long time. If you think Sinclair's first computer was the ZX81 — or for those who remember it, the ZX80 — then you're wrong.

The first was the mail order MK 14 Computer kit in 1978. It had a hexadecimal membrane keyboard, a quarter K of RAM, a calculator style display, and the cassette interface was an optional extra. Admittedly, it wasn't sold under the Sinclair name but as a product of Science of Cambridge Limited. But this company later marketed the Sinclair ZX80, so we can jump straight to the obvious conclusion — it was Sir Clive all along. When the ZX81 came along, Science of Cambridge disappeared and Sinclair Research was born.

But Sinclair's history goes back long before that. Hardly anyone in the computer generation will remember the Black Watch fiasco. What looked like a highly desirable product, an early LED digital watch, couldn't be supplied in sufficient numbers because the maker of a vital chip let Sinclair down. Sinclair did much better out of the calculator boom of the mid seventies, producing half a dozen different models that sold in large numbers. There was even one that would strap on your wrist, but that was available only as a kit! The wrist calculator was sold by a company called Sinclair Instrument Limited.

You have to be one of the older electronics nuts to remember Sinclair Radionics Limited of the late sixties and early seventies. It sold Hi-Fi amplifier modules, odd polystyrene foam speakers, and the 'world's smallest' transistor radio, the Micromatic. This was a very successful company, one that regularly booked lyrical four page advertising spreads in the electronics mags. The equipment itself was very much what we've come to expect from Sinclair — high specifications, compact size, suspect reliability, and a bargain price.

Sinclair Radionics moved out of Hi-Fi into calculators and digital multimeters. They got the Queens Award to Industry in 1978, then became Sinclair Electronics Ltd, making oscilloscopes, frequency meters, and even logic analyzers, under the brand name 'Thandar'. Last I noticed it was Thandar Electronics Ltd. and still going strong.

Only the incredibly ancient will remember Sir Clive's first business, and I don't admit to being as old as all that. The story goes that he earned a crumb or two in the days when semi-conductors were exotic and expensive by buying up manufacturer's out-of-spec transistors, sorting out the useful ones with a transistor tester and selling them at knock-down prices to electronics hobbyists. This make-do-and-mend beginning has stood our entrepreneur in good stead through the years. Even in the Spectrum, manufacturers' fallouts were used to keep memory costs down by using just the good halves of partially functioning memory chips.

So Sir has a record of business success going back more than twenty years. Those of you who admire this record and who wouldn't mind emulating it are now in luck. Before giving himself over fully to business activities, Sir Clive did a little writing. Naturally, he quickly realised that this was no activity for a grown-up person and desisted, but like Joanna Lumley's early video appearances, the evidence remains.

An afternoon's scholarly research through his adolescent indiscretions has revealed to me the whole secret of Sinclair's success. With a single cantrip he combines science and art and produces gold from dross. Here it is, from Clive Sinclair's own book *Transistor Subminiature Receivers Handbook for the Home Constructor**, and I quote; 'Simplifying circuits and obtaining the maximum performance from a limited number of components is an intriguing pastime.'

Now those are the words of a born businessman.

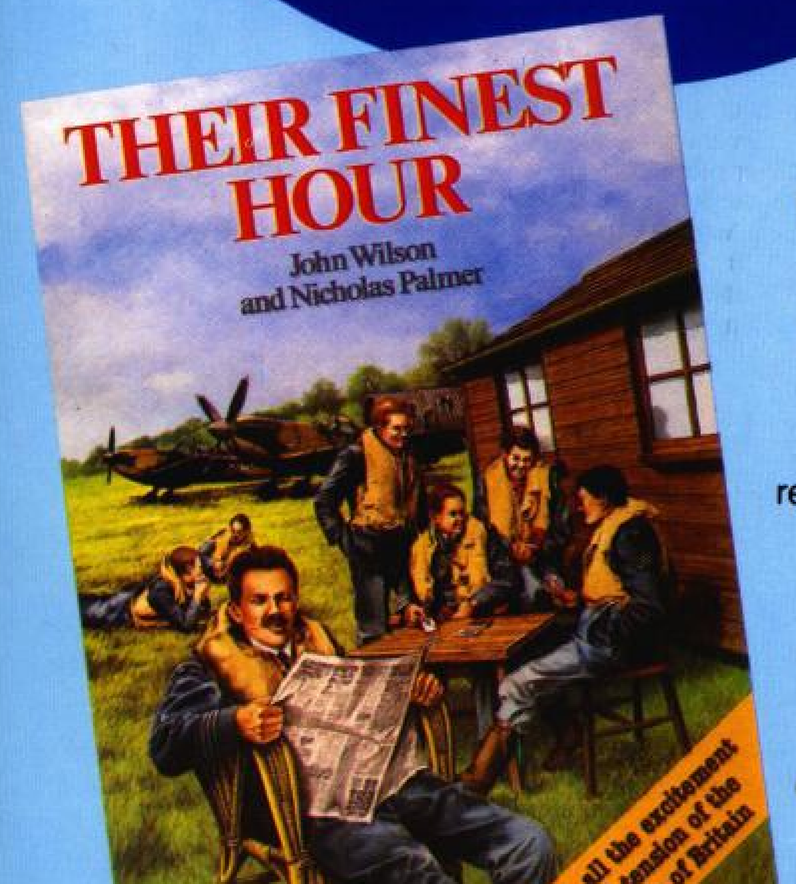
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